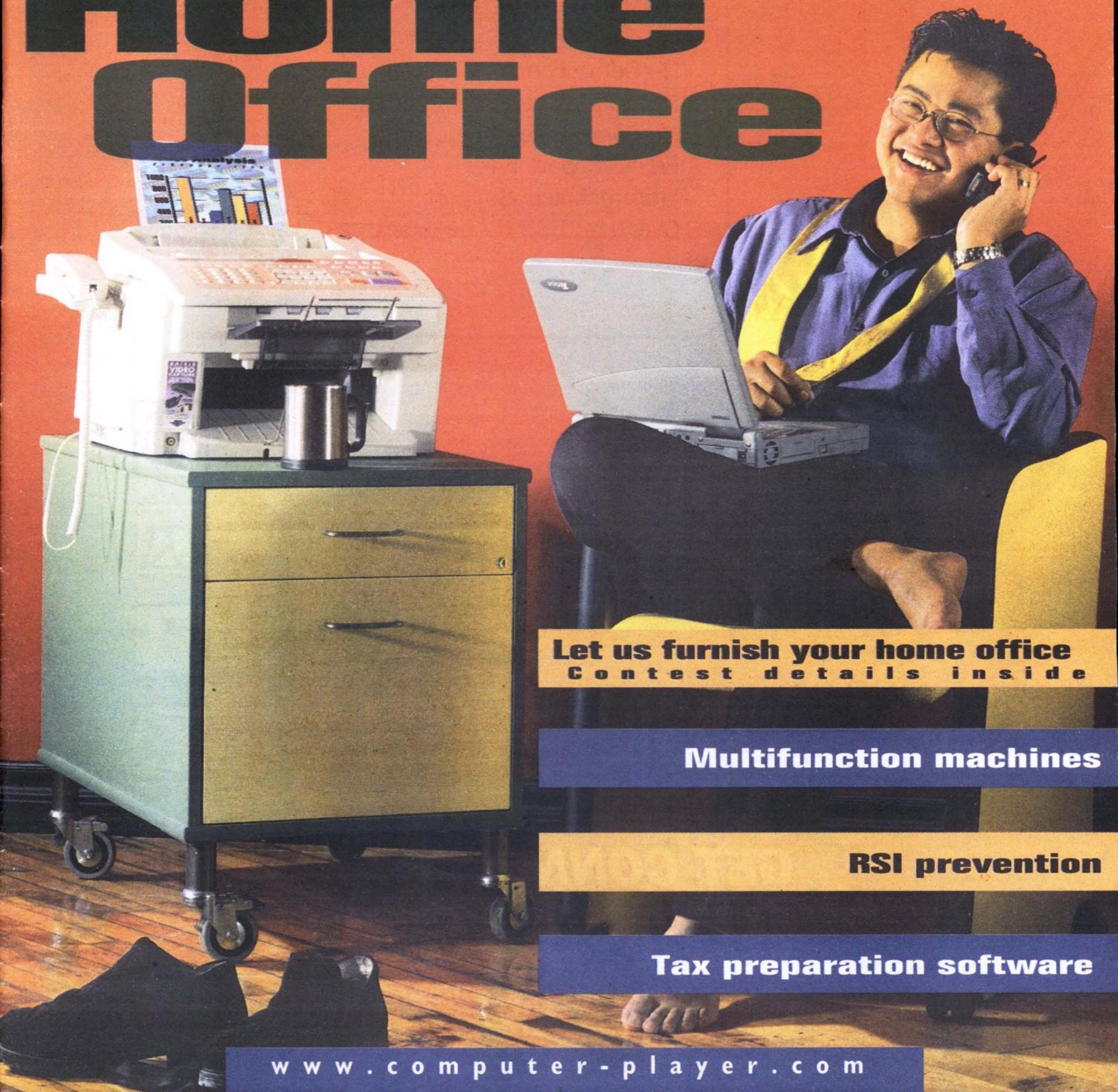


# COMPUTER! PLAYER!

## Home Office



**Let us furnish your home office**  
Contest details inside

**Multifunction machines**

**RSI prevention**

**Tax preparation software**

# FLAT RATE Internet Access



**\$ 19.50**

No Setup Fee  
No Hourly Charges  
No Prime-time Restrictions  
Free Software Kit  
Free Technical Support  
Over 1600 33.6 / 56kbps Lines



Now available at no extra charge



## SURF THE WEB

**GET CONNECTED  
654-6088**

<http://www.intergate.bc.ca>  
Email: [staff@intergate.bc.ca](mailto:staff@intergate.bc.ca)



Some restrictions may apply.

Need  
On-Site  
Service?  
Call Us!



FREE  
1st month  
Internet Accesss by  
Infinet Group

### Pentium® 133/166MMX starter system

Asus PL97 chipset motherboard, PCI Bus  
32 MB EDO RAM, exp. to 128MB, 512PB cache  
Panasonic 1.44MB floppy drive  
32 bit EIDE and floppy controller  
2x16550 UART serial & 1 parallel ports  
Mini-tower 15" with 230 watt P/S  
Quantum 2.1 GB Ultra EIDE hard drive  
Mitsumi 104 Key keyboard  
Voxon 14" N/L monitor  
Build-in Video card Expandable to 4MB ram  
Logitech 2 button serial mouse  
Toshiba 24X EIDE CD ROM  
Acer FX 16 bit sound card w/speakers

**\$1160/1190**

### Pentium® 200MMX/233MMX Professional System

Asus Intel TXP4 Chipset Motherboard, PCI Bus  
32MB SDRAM, exp. to 256MB, 512 PB cache  
Panasonic 1.44MB floppy drive  
32 bit EIDE and Floppy controller  
2x16550 UART serial & 1 parallel ports  
Mid-tower 19" with 230 watt P/S  
Quantum 3.2 GB Ultra EIDE Hard Drive  
Mitsumi 104 Key keyboard  
Acer 15" N/L monitor  
ATI 3D expression + 2MB RAM video card  
Microsoft J2 Serial mouse  
Toshiba 24X EIDE CD Rom  
Sound Blaster 16 bit sound card w/speakers

**\$1480/1580**

### Monthly Special

**\$98.00**

Toshiba 24x CD ROM EIDE

### Computer Problems

Upgrade 386's, 486's, Monitor Repair,  
Hard Drive Upgrades



### Notebook

#### DEAWOO PENTIUM 150 NOTEBOOK

Pentium 150, 16MB RAM, 1.4 GB Hard Drive  
12.1" TFT screen, 10x CD-ROM, Sound Card and Windows 95

#### IBM THINKPAD 380D NOTEBOOK

Pentium 150 MMX, 16MB RAM, 2.1GB Hard Drive  
12.1 TFT screen, 8x CD-ROM and Windows 95



Networking Partner

We're Keeping Up with Your Networking Needs

### Multi Media World

Acer 24X CD-ROM	\$89	Sound Blaster 16	\$58
Mitsumi 24X CD ROM	\$98	Sound Blaster 64 AWE	\$109
NEC 24x CD ROM	\$99	Sound Blaster 64 AWE gold	\$269
Panasonic 24X CDROM	\$98	Snappy video capture 2.0	\$299
Toshiba 24X CDROM	\$98	Koss TD/80 headphone	\$65
Creative Lab DX2 DVD ROM	\$489	Altec Lansing Speakers	call
Acer ESS 16 bit sound card	\$25		

# NU-AGE COMPUTER PLUS

Affordable  
Computer &  
Communication  
Products

### MONITORS

ACER 14" NM	\$239
ACER 15" NM DIGITAL	\$350
ADI 4P LR, N/L 28	\$399
ADI 17" 5P LR	\$795
MITSUBISHI 15" VX	\$560
MITSUBISHI 17" HX	\$990
E500 15"	\$480
PROVIEW 14" NM LR	\$219
PROVIEW 15" NM LR F/S	\$320
SONY 15 SF 15" NM	\$660
SONY 17 SE2T 17" NM LR	\$1189
VOXON 15" N/X	\$269

### PRINTERS

CANON BJ 30 BUBBLE JET	\$330
CANON BJC250 COLOR BUBBLE JET	\$199
CANON BJC4300 BUBBLE JET	\$299
HP 820CXI INKJET COLOR	\$529
HP 6L LASERJET	\$530
HP 6P LASERJET	\$970
HP LASERJET 5	\$1488
HP LASERJET 6MP	\$1280
OKIDATA 4W LASER	\$299
RAVEN 2405 24 PIN	\$229
RAVEN 2467 24 PIN Wide/Quiet	\$579

### MODEMS

CARDINAL 33.6 INT. FAX/MODEM	\$79
SUPRA 33.6 INT FAX MODEM	\$79
U.S. ROBOTICS 33.6 SPORTSTER EXTERNAL	\$215
U.S. ROBOTICS 33.6 SPORTSTER INTERNAL OEM	\$109
U.S. ROBOTICS 56K SPORTSTER INTERNAL OEM	\$189
MOTOROLA 56K INT VOICE MODEM OEM	\$139

### FLOPPY DRIVES

1.44 MB FLOPPY DRIVE	\$29
PANASONIC LS120 INT. DRIVE	\$169

### VIDEO CARDS

CIRRUS LOGIC 5446 PCI (U.S.A.)	\$38
ATI 3D EXPRESSION+ 2MB SGRAM	\$89
ATI 3D PRO TURBO 4MB SGRAM	\$179
DIAMOND STEALTH 3D 3400 XL 4MB	\$269
MATROX MYSTIQUE 4MB	\$169

### HARD DRIVES

QUANTUM 2.0 GB ULTRA	\$229
QUANTUM 3.2 GB ULTRA	\$269
QUANTUM 4.2 GB ULTRA	\$299
QUANTUM 6.3 GB ULTRA	\$420
W.D. 2.0GB EIDE	\$229
W.D. 2.5GB EIDE	\$249
W.D. 3.2 GB EIDE ULTRA	\$269
W.D. 4.2 GB EIDE ULTRA	\$299

### RAM

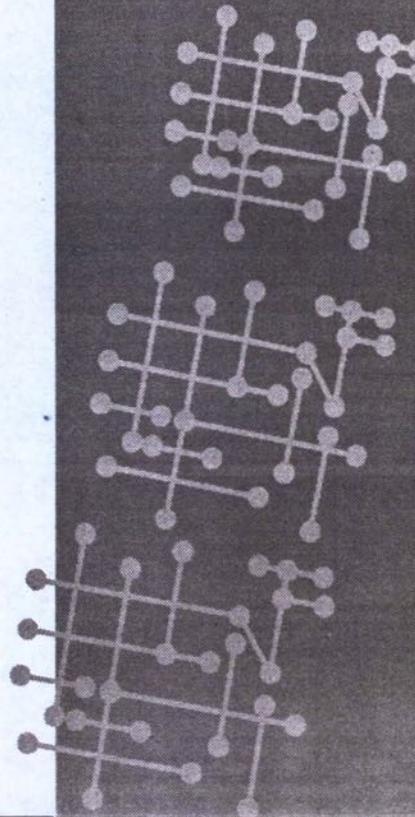
4MB SIMM 70NS 30PIN	call
8MB SIMM 60NS 72PIN	call
16MB SIMM 60NS 72PIN	call
32MB SDRAM 68PIN	call

### TAPE BACKUP

COLORADO 3.2 GB TAPE BACKUP INT T3000	\$239
COLORADO 5.0 GB IDE TAPE DR. INT	\$299
IOMEGA ZIP DRIVE EXT	\$189
IOMEGA SCSI JAZ 1G EXT	\$559

### SOFTWARE

MICROSOFT WINDOWS 95 OEM (with system)	\$135
WORDPERFECT 6.1 SUITE	\$369
MICROSOFT WORKS FOR WINDOWS	\$69
MICROSOFT PUBLISHER FOR WINDOWS	\$92



BUSINESS HOURS:

MON-FRI 9:00-6:00

SAT 11:00-5:00

FREE PARKING AT REAR

2 YEAR PARTS & LABOUR WARRANTY ON SYSTEMS.

1 YEAR WARRANTY ON PARTS.

ABOVE PRICES REFLECT 2% CASH DISCOUNT.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

AMERICAN EXPRESS ADD 3%.



### M/S HOME CD ROM PACKAGE

Toshiba 24x  
speed CD SB16 bit Sound  
Card M/S Encarta Package  
2 Shielded Speakers

**\$269**



The Computer Player

MARCH 1998

PROFESSIONAL INTERNET SERVICE PROVIDED TO YOU AT AFFORDABLE RATES

**MDI Internet Inc.**  
We are part of a  
**Global Roaming Network**

Tel: (604) 602-9168

E-Mail [info@mdi.ca](mailto:info@mdi.ca) <http://www mdi.ca>

M A R C H 1 9 9 8

h o m e o f f i c e



10  
Having it all  
Multifunction  
roundup



12  
Working at home?  
Set it up right



14  
Home office  
furnishing

32

The Mac gets a  
little respect

38

Repetitive  
strain do's and  
don'ts

42

Investing for  
the new  
millennium

news • reviews • columns • online

### columns

- 19 Softwary
- 23 The world is my cubicle
- 24 Power User
- 34 Lindfield's Line
- 50 You asked us

### news

- 8 BC news briefs
- 28 56K modem draft standard set
- 36 New Compaq head a real tiger

### books

- 40 Apple: The Inside Story
- 40 Internet in a Nutshell
- 43 Guerrilla Marketing

### software

- 44 The balance sheet:  
A roundup of tax software

### games

- 46 LEGO Island plays well
- 47 Impressive 3D gaming for less

### reader services

- 6 Letters
- 48 中文天地
- 52 MarketPlace
- 54 Advertiser's Index



Join Now **4<sup>88</sup>\*** /month  
**150 hours**

**Free setup and  
Fast service**

### Business Accounts

(includes email dial-up)

- \$18<sup>88</sup> per month ([www.mdi.ca/yourname](http://www.mdi.ca/yourname))
- \$32<sup>88</sup> per month ([www.yourname.com](http://www.yourname.com))

\* Some restrictions apply. Call us for more details or  
visit <http://www.mdi.ca/joinus.html>

**MDI Internet Inc.**

Suite 700 - 1080 Howe St,  
Vancouver, Canada V6Z 2T1



# Spring Into this...

## ...for pleasure

### Faronics Family System

#### Faronics 5200MMX32

- Intel TX Chipset Motherboard 512K Cache
- Intel Pentium 200 MMX CPU
- 2.5GB Ultra DMA IDE Hard Drive
- 32MB EDO RAM
- 1.44MB Floppy Drive
- 24X CD-ROM, 32 Bit
- Cirrus Logic 5446 2MB Video Card
- Jaton 33.6 Data Fax Modem PnP \*Made in USA
- 3D Surround Sound Card
- Labtec LCS-1014 Speakers
- Enhanced Windows 95 Keyboard
- Microsoft Intelli-Mouse with Mouse Pad
- Flash Rom Bios
- Ultra DMA IDE Controller, Mode 4
- 2 High Speed Serial Ports
- Enhanced Parallel Port
- Faronics Mid-Tower Case, CSA Approved Power Supply

**INCLUDES:**

- 15" KTX SVGA Monitor, NI, Low Radiation, OSD, 28dpi

**ALSO INCLUDES:**

- Microsoft Windows 95 OSR2; Pre-Installed with CD & Manual
- Microsoft Works, Microsoft Encarta 98, Microsoft Cinemania 97, Microsoft Golf, Microsoft Money, Microsoft 3D Movie Maker, Microsoft Game Sample, Lotus Smartsuite: Word Pro, Lotus 1-2-3, Organizer, Freelance, Approach, ScreenCam
- Norton Anti-Virus for Windows 95

**Two Year Parts & Labour Warranty****Family Price  
\$1599.00****2 Year Parts & Labour Warranty  
with Guaranteed 2 Day Turnaround!**

### Faronics Dream Machine

#### Faronics PII5233MMX64SD

- Intel LX Chipset Pentium II Motherboard
- Intel Pentium II 233 MHz MMX CPU
- 6.4GB Ultra DMA IDE Hard Drive
- 64MB SDRAM - 10ns
- 1.44MB Floppy Drive
- 32X CD-ROM, 32Bit
- Cirrus Logic 4MB AGP Video Card
- Motorola 56K Data Fax Modem PnP
- 3D Surround Sound Card
- Labtec LCS-1224 Speakers
- Enhanced Windows 95 Keyboard PS/2
- Microsoft Intelli-Mouse PS/2 with Mouse Pad
- Flash Rom Bios
- Ultra DMA IDE Controller, Mode 4
- 2 High Speed Serial Ports; Two USB Ports
- Enhanced Parallel Port

- Faronics ATX Pentium II Case, CSA Approved Power Supply

**INCLUDES:**

- 17" KTX Monitor, NI, Low Radiation, OSD, 28dpi

**ALSO INCLUDES:**

- Microsoft Windows 95 OSR2; Pre-installed with CD & Manual
- Microsoft Works V4.5 with Manual, Microsoft Encarta 98 (2 CD Set - Deluxe), Microsoft Golf V3.0, Microsoft Money 98, Microsoft Greetings Workshop, Microsoft Age of Empires, Microsoft Interactive CD Sampler
- Norton Anti-Virus for Windows 95

**Two Year Parts & Labour Warranty****The Dream is yours for  
\$2899.00****No Lemon Warranty: If you have more than 2 problems within 6 months with your new Faronics computer, we'll replace the whole unit free**

## ...for work



### Corporate Workstation

#### Faronics Platinum Workstation P5233MMX32SD

- PA-2012 1MB Cache MMX Motherboard ATX
- Intel Pentium 233 MHz MMX CPU
- 4.3GB Maxtor Ultra DMA IDE Hard Drive
- 32MB SDRAM
- 1.44MB Floppy Drive
- 24X CD-ROM, 32Bit
- Cirrus Logic 4MB AGP Video Card
- Enhanced Windows 95 Keyboard PS/2
- Microsoft Intelli-Mouse PS/2 with Mouse Pad
- Flash Rom Bios
- Ultra DMA IDE Controller, Mode 4
- 2 High Speed Serial Ports
- Enhanced Parallel Port

- Faronics ATX Case, CSA Approved Power Supply

**INCLUDES:**

- Microsoft Windows 95 OSR2; Pre-installed with CD & Manual
- Microsoft Works V4.0, Microsoft Word 97, Microsoft Publisher 97, Microsoft Bookshelf
- Norton Anti-Virus for Windows 95

**Two Year Parts & Labour Warranty****Workstation  
as Configured  
\$1599.00****Call Faronics for a Customized  
Workstation Quotation****Faronics is also authorized to sell IBM  
and COMPAQ Workstations and Servers**

### Corporate Server

#### Faronics Titanium Server PII5333MMX96SD

- Intel LX Chipset Pentium II Motherboard
- Intel Pentium II 333 MHz MMX CPU
- 4.55GB Ultra Wide SCSI Hard Drive
- Adaptec 2940UW SCSI Controller
- 96MB SDRAM - 10ns
- 1.44MB Floppy Drive
- 32X CD-ROM, 32Bit
- Cirrus Logic 4MB AGP Video Card
- Enhanced Windows 95 Keyboard PS/2
- Microsoft Intelli-Mouse PS/2 with Mouse Pad
- Flash Rom Bios
- Ultra DMA IDE Controller, Mode 4
- 2 High Speed Serial Ports; Two USB Ports
- Enhanced Parallel Port

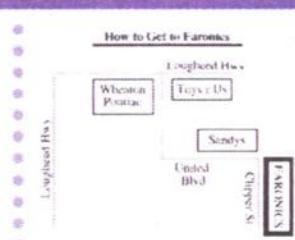
- Faronics ATX Pentium II Case, CSA Approved Power Supply

**INCLUDES:**

- Microsoft Windows NT 4.0 OEM
- Microsoft Office 97 Pro Full Version OEM

**Two Year Parts & Labour Warranty****Server as Configured  
\$3699.00****Call Faronics for a Customized  
Server Quotation****No Payments for 90 Days Available OAC.****Customize the Systems to any Configuration - Just Call or Fax 540-8179 for a Quote**Prices and Specifications Subject to Change without Notice**Faronics  
TECHNOLOGIES INC****540-8199****Check out [www.faronics.com](http://www.faronics.com)****Hours: Mon - Fri 9-6****Sat - Sun 11-5**

57A - 53 Clipper Street, Coquitlam, B.C. V3K 6X2

**NO SURCHARGE**

PUBLISHER J. David Ritter  
MANAGER Judy Prange

ASSOCIATE EDITOR Megan Johnston  
CONTRIBUTING EDITOR Alan Zisman

PRODUCTION MANAGER Sari Prelutsky

PRODUCTION Jason Edmunds,  
Jennifer Fitzgerald, Sherly Ho,  
Alexandra Morris

ADVERTISING SALES

Jamie Leighton, [jamie@tcp.ca](mailto:jamie@tcp.ca)  
Randy Chaster, [randy@tcp.ca](mailto:randy@tcp.ca)

**Computer Player!** is published monthly by Canada Computer Paper Inc. Computer Player! is a member of the Canada Computes! family of publications:

Computer Player! circulation 60,000

Ottawa Computes! circulation 40,000

Québec Micro! circulation 60,000

Toronto Computes! circulation 110,000

**Canada Computes!** total circulation 270,000

**Canada Computes!**

EDITOR-IN-CHIEF Mara Gulens

MANAGING INTERIM EDITOR Lara Thais King

ART DIRECTOR Jennifer Hanlon Scott

**Computer Player!**

425 Carroll St., Suite 503, Vancouver, BC V6B 6E3

Phone (604) 608-2688 Fax (604) 608-2686

**Toronto Computes!**

99 Atlantic Ave., Suite 200, Toronto, ON M6K 3J8

Phone (416) 588-6818 Fax (416) 588-4110

**ADVERTISING SALES**

Frank Houston, [frank@tcpcon.com](mailto:frank@tcpcon.com)

**Ottawa Computes!**

260 St. Patrick St., Suite 303

Ottawa, Ontario K1N 5K5

Tel: (613) 789-6431 Fax: (613) 789-6433

**ADVERTISING SALES** Chris Cole,

[sales@ottawacomputers.com](mailto:sales@ottawacomputers.com)

**Québec Micro!**

360 Notre Dame O., Suite 103

Montréal, QC H2Y 1T9

Tel: (514) 843-4770 Fax: (514) 843-3484

**ADVERTISING SALES** Steve Gagné,

[ventes@quebecmicro.com](mailto:ventes@quebecmicro.com)

**ABOUT THE COVER**

The cover photo by John Narvali includes furniture from IKEA, a Toshiba Tecra 530 CDT and a Brother MFC-7000 FC multifunction device. The cover was designed by Jennifer Hanlon Scott using Adobe Photoshop 4.0 and Illustrator 6.0.

**Canada Computer Paper Inc.**

unless otherwise specified.

Subscriptions: \$29.95 (includes GST) a year or \$49.90 (includes GST) 2 years.

American subscriptions: US\$75

Overseas subscriptions: Can\$135

Mail cheques and/or money orders

(payable to Canada Computer Paper Inc.) to:

**Computer Player!**

425 Carroll Street, Suite 503, Vancouver, BC V6B 6E3

Canadian Publication Mail Sales

Product Agreement #1218026

Printed in Canada

ISSN 1188-9462

**Computer Player!** is distributed free through hundreds of stores & street boxes around the Greater Vancouver area.

The publisher reserves the right to refuse sexist, racist, or otherwise offensive advertising. The publisher also reserves the right to be the final judge of what is appropriate.

**ANNOUNCEMENTS:** [pressreleases@tcpcon.com](mailto:pressreleases@tcpcon.com)  
**YOU ASKED US:** [yau@tcpcon.com](mailto:yau@tcpcon.com)

APRIL 1998 ISSUE: Careers

AD DEADLINE: Tuesday, March 17, 1998

CAMERA READY: Thursday, March 19, 1998

Distribution date: Friday, April 3, 1998

The full text of CP! is available to read online at: <http://www.computer-player.com/>

# Keeping up with the Joneses Inc.



## letter from the editor

I was recently deconstructing the big stack of papers on my desk at home and forming smaller stacks of bills, receipts, statements, and pay stubs (in preparation for avoiding filing my taxes for a few more weeks), when I noticed that the format of my pay stubs for the last year had changed three times. Though not a dramatic revelation, it was tangible evidence of the changes my employer, Canada Computer Paper Inc., had gone through in a 12-month period. These small sheets of paper signified jobs moved, jobs made more efficient, but most of all jobs changed. The cliché that change is constant has never been more true in the workplace.

And in the spirit of purposeful change, we've made a alteration to the *Computer Player!* that addresses the issues faced by both employers and employees whose work has been and continues to be modified by new technology. In our new *Digital Workforce* section we will look at how businesses are employing new software, hardware, and services, and we will be sharing some of their experiences—good and bad.

For the *Digital Workforce* debut, we start small, very small, with the home office. Deciding to work at home means big changes for an individual conditioned to "going" to work every day. The boundaries between work and play blur. You may be able to work in your pajamas, but there is also the lure of TV, coffee, food, sunshine ... .

And if working at home also means working for yourself, it comes with an extra set of challenges. With the exhilaration of being your own boss, there is the agony of making all the decisions yourself and

having no one to share the blame or the applause. And mulling over the latest technology that could help you keep up with or pull ahead of the competition is a luxury when you also have to answer the phone, respond to the mail and get the bills paid.

Our hardware review (page 10) this month looks at a type of computer peripheral aimed directly at home office workers as well as smaller offices. These machines, like home office workers themselves, are capable of performing many duties. Referred to as multifunction devices, they package a scanner, fax, copier and printer into one machine. They are a good option for users with complex needs but limited space and dollars.

We also look at how to set up your home office (page 12) and some furniture ideas (page 14). Some of those ideas are provided by IKEA, as is \$1,000 worth of home office furniture the company will give to the winner of our home office contest (see page 28 for details).

### Investing in new technology

We welcome Tom Klein back to the pages of *Computer Player!* in this issue. Klein will be frequenting our pages with his thoughts on technology stocks. This month he writes about the recent wave of mergers and acquisitions, the rise of enterprise resource planning companies and other niche areas where you may want to plant your money and watch it grow (after your own careful thought and research, of course).

### Do as I say, not as I do

While I'm delaying the inevitable (taxes not death), I heartily recommend that you read our review of this year's crop of tax software (page 44), as doing so will inspire you to file on time and sleep soundly.

Let us know what you think,

Megan Johnston, Associate Editor, [meganj@tcp.ca](mailto:meganj@tcp.ca)

## Your letters please

Letters on issues raised in the paper or general computer topics are welcome. Please be brief. We regret that we are unable to look up stories from past issues, suggest products, or solve all your computer problems. Only those with names and e-mail or snail-mail addresses will be published. Letters may be edited for space or content.

The Editor,  
*Computer Player!*,  
*Canada Computes!*  
BC Edition  
425 Carroll Street  
Suite 503,  
Vancouver, BC  
V6B 6E3  
[cdletters@tcpcon.com](mailto:cdletters@tcpcon.com)

### Amiga amore

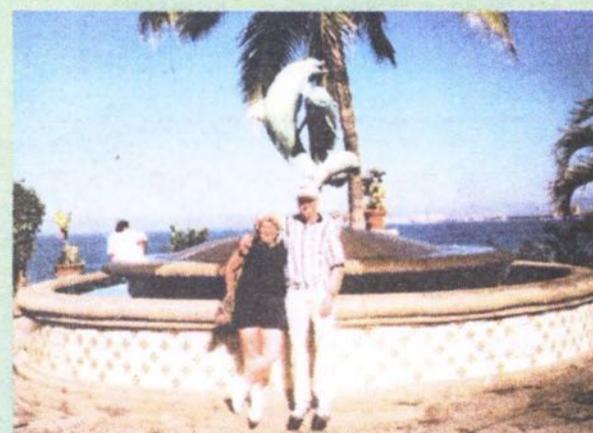
Having just read the article on the re-emergence of the Amiga (February 1998), I would like to congratulate the author, and yourselves, for producing a well researched, and refreshingly unbiased report. Thank you.

Mark Le Noury

Congrats to *CP!* for recognizing the revitalization of the amazing Amiga computer platform. I have owned and operated two Amigas over the last ten years. The OS has stagnated over the last few years, but I would not give up my Ami for anything else out there.

Mark Tocheri

Thank you for your coverage of the Amiga. Living here in "Microsoft Country," less than an hour from Redmond, Wash., pretty much all the computer coverage I see revolves



It's been a trip

Albert L. Christensen, of Edmonton, sent in his thanks and some photos taken on the trip to Mexico that he won for his participation in our August readership survey.

around Microsoft Windows 95, and the articles are very, um, non-critical, to put it politely.

I thought it was an interesting coincidence

that the same month also had articles on digital photo manipulation, as in my business I do just this with Amigas!

Steve Greenfield

### Newton fan speaks out

Re The latest in handheld PCs (January 1998): I bought a Newton and it came with two cords to allow it to connect to both my Mac and DOS computers.

I find that the Newton's ability to recognize my handwriting makes it the perfect tool to take notes at meetings.

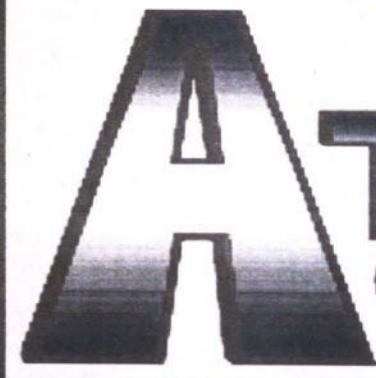
I also think that if the Newton was any smaller it would be difficult to write on it. Its ability to act as an electronic sheet of paper makes it the ideal replacement for my laptop.

It does all the tasks that my laptop ever did without the bulky size and weight. Maybe if it was evaluated in respect to a small laptop, rather than a limited pocket sized unit, your conclusions may have been swayed in its favour.

Les Roberson ♦

## Camera Winner

David Boulanger is the winner of a draw at Comdex PacRim for a Kodak Digital Science DC210 digital camera. The contest was open to readers of Canada Computer Paper Inc.'s four publications (*Computer Player!*, *The Computer Paper*, *Canadian Computer Wholesaler* and *Government Computer*) who filled out one of our survey forms at the trade show in January. Thanks to Mr. Boulanger and the other 1,500 readers who shared their views on our publications. We'll be using the information to make sure we continue to give you what you want to read. ♦



# ATCRON

## COMPUTER GROUP INC.

Web: [www.tntcomputer.com](http://www.tntcomputer.com)  
Bby: [tntbby@tntcomputer.com](mailto:tntbby@tntcomputer.com)

Rmd: [atcron@tntcomputer.com](mailto:atcron@tntcomputer.com)  
Van: [tntvan@tntcomputer.com](mailto:tntvan@tntcomputer.com)



We will beat any brand name system prices by \$50

Intel 512K Cache 32MB SDRAM 15" MONITOR 4MB AGP VIDEO 32X CD-ROM

While Quantity Last

Up to  
**25% Off**  
Or More

Vancouver

**738-9882**

Fax: (604) 738-9867

1804 W. Broadway

Burnaby

**570-0330**

Fax: (604) 570-0280

3997 Hastings St.

Richmond

**273-3316**

Fax: (604) 270-0366

201-12020 Brideport Rd

Mon-Sat 10 - 6:30pm Sunday 11 - 5pm

## Monthly Special

SoundBlaster AWE 64 **\$93** Millenium II 4M AGP **\$249**  
56K Voice Modem **\$89** Pentium II MB - AT **\$189**  
BTC 24X CDROM **\$79** Creative Dxr2 DVD Kit **\$389**

### Net Surfer

**6x86MX 200**

**\$869**  
Reg '1039

PCI MB Support MMX™  
512K Pipeline Burst Cache  
16MB EDO Memory  
1.7 GB EIDE Hard Drive  
1.44 Floppy Drive  
64bit MPEG Video  
EIDE 24X Speed CDROM  
2 Amplified Speakers  
SoundPro 3D 16bit Sound Card  
33.6 Voice Fax/Modem  
Windows 95 Keyboard & Mouse  
15" Tower Case w/ 230W PS  
14" NI, LR SVGA Monitor  
Reg '1299

**Pentium 166MMX** **\$929**

Free Software Packages  
Word Processor  
Spread Sheet  
Database  
Freeland Drawing  
Personal Organizer  
ScreenCam

### Ultra Station

**6x86MX 200**

**\$989**  
Reg '1439

PCI MB Support MMX™  
512K Pipeline Burst Cache  
32MB RAM  
2.5GB EIDE Hard Drive  
1.44 Floppy Drive  
64bit 2MB Video w/ MPEG  
EIDE 24X Speed CD-ROM  
Rockwell 33.6 Voice Fax Modem  
Windows 95 Keyboard & Mouse  
Sound Pro 3D 16bit PnP Sound  
2 Amplified Multimedia Speakers  
15" NI, LR SVGA Monitor

intel

Lease  
\$35/mth\*

**Pentium 200MMX**

**\$1069**  
Reg '1799

**Pentium 233MMX**

**\$1169**  
Reg '1869

### Pentium II

**Pentium II 233**

**\$1599**  
Reg '1999

Intel 440LX Chipset Pentium-II MB  
Built-in AGP, ECC, DIB Support  
32MB Lightning Fast SDRAM  
3.2GB EIDE Hard Drive  
1.44 Floppy Drive  
EIDE 24X Speed CD-ROM  
3D16bit Sound Card  
2 Amplified Speakers  
Windows 95 Keyboard & Mouse  
Rockwell 56K Kflex Voice Modem  
AGP 3D 4MB Video w/ MPEG  
15" NI, LR SVGA Monitor

intel

**Pentium II 266** **\$1769**

Reg '2799

**Pentium II 300** **\$1969**

Reg '3299

**Pentium II 333** **\$2269**

NEW

### Ultra Pentium II

intel

**Pentium II 233** **\$2099**  
Reg '2269

ASUS P2L97 LX Chipset Pentium-II MB  
Built-in AGP, ECC, DIB Support  
32MB Lightning Fast SDRAM  
Fujitsu 4.3GB EIDE Hard Drive  
1.44 Floppy Drive  
Toshiba 32X Speed CD-ROM  
Diamond Viper 4MB AGP Video  
USR 56K x2 Voice Fax/Data Modem  
Sound Blaster AWE 64 with Wavetable  
Windows 95 Keyboard & Mouse  
2 Amplified Speakers  
15" NI, LR SVGA Monitor

TRUE  
128  
BIT

**Pentium II 266** **\$2269**

Reg '2999

**Pentium II 300** **\$2469**

Reg '3499

**Pentium II 333** **\$2769**

ASUS intel

### Employment Opportunity

Hiring Experienced Sales, Technician, Office Clerks w/  
Excellent communication skills and telephone-manner

### Top 10 Mainboards

PCI MB 512K w/ Sound **\$99**  
PCI MB 512K w/ Sound, SVGA **\$109**  
AGP Pro AGP w/ 1M, Sound **\$169**  
ABIT PX5/AX5 TX 512K **\$149/169**  
ASUS SP97 512K w/ SVGA **\$129**  
ASUS TX97/97-E TX 512K **\$179**  
ASUS TX97-X/XE ATX 512K **\$189**  
FIC VA502 512K UltraIDE/SD **\$119**  
FIC PA2012 Apollo-VP3 1M AGP **\$189**  
Gigabyte TX2 TX **\$139**  
EPOX P55-VP3 w/ AGP 512K **\$169**  
Shuttle Hot 569/571 TX 512K **\$139/159**

Houston M710 Pentium II LX MB **\$179**  
ASUS P2L97 Pentium II LX MB **\$209**  
ASUS P2L97 Dual P-II LX MB **\$389**  
ASUS P2L97DS Dual SCSI **\$489**  
Gigabyte 686LX/BLX AT **\$209**

### CPU & RAM

Pentium 166/200 **\$159/239**  
Pentium 166/200 MMX **\$149/179**  
Pentium 233 MMX **\$279**  
Cyrix 6x86MX (M2) 166/200 **\$109/119**  
AMD K6 166/200/233 **\$169/219/229**  
Pentium II-233/266/300 **\$419/559/749**  
Pentium II-333 **\$1129**

8 / 16 / 32 M EDO 60ns **\$22 / 39 / 85**  
32 / 64M SDRAM **\$79 / 199**

### Misc.

Mitsumi/Packard Bell 104 KB...\$18  
Fujitsu 8725/4725 KB...\$29/59  
Liteon Natural KB Touchpad...\$85  
Microsoft Natural KB...\$79  
Mitsumi PS/2 Bus Mouse...\$25  
Logitech 2B/1st Mouse+...\$19/39  
Power Protection  
APC UPS 280/450...\$145/249  
UPS 600/Smart 420...\$329/359

### SCSI / Networks

Adaptec 1505/1520 SCSI...\$89/99  
Diamond Fireport 40UW...\$239  
Adaptec 2940U Ultra SCSI...\$249  
Adaptec 2940 UW (Kit)...\$299  
Ethernet ISA/PCI combo...\$29/32  
3Com 905TX PCI 10/100 BT...\$88  
Dlink PCI Ethernet Combo...\$49  
Intel EtherExpress PRO 100...\$89  
9 Port 10B-T Hub w/ BNC...\$89

### With system purchase

Windows 95 OSR2 Full Ver...\$129  
Lotus SmartSuit 97 Full Ver...\$39  
Corel Office Suit 8...\$99  
MS-Encarta 97 Home CD...\$89  
MS-Office Pro97 Full...\$349  
NT 4.0 Wkstation Full...\$269

### Drives

1.7 / 2.5G...\$179 / 199  
Quantum 3.2/4.3G Ultra...\$249/279  
Quantum 6.4/8.4G Ultra...\$359/499  
WD 3.2/4.3/6.4G...\$249/299/399  
SCSI Hard Drive  
QT 3.2/4.3/6.4G ST...\$359/429/529  
QT Altas 2.2/4.5 UW...\$349/729  
SG Cheetah 4.5G 10K rpm...\$899

Panasonic 1.44 Floppy...\$28  
LS120MB Flopy/Disk...\$149/22  
IOmega Zip100 IDE...\$129

### Printers

Canon BJC 250/4300...\$189/259  
Epson 400/600/1440 dpi...\$245/339  
HP 670/692/722C...\$279/299/419  
HP 820/870/890C...\$349/509/539  
HP OfficeJet 300/350...\$579/619

### Laser

Brother HL730DX 600dpi...\$499  
Brother HL760DX 1200dpi...\$569  
HP 6L / 6P 600dpi...\$509/949  
Fujitsu PrntPartner 10ppm...\$699

### Video & Monitor

64bit SVGA 1M w/ MPEG...\$29  
S3 3D Virge-DX 4M EDO...\$69  
ATI 3D Xpression+ 2M/4M...\$79/109  
Diamond Viper V330 4M...\$219  
ATI 3D PC2TV 2M/4M...\$105/129  
ATI Xpert@work 4M / AGP...\$199/209  
ATI Xpert@play 4M / AGP...\$209/229  
ATI All-In-Wonder Pro 4/8M...\$289/369  
Matrox Mystique II 220 4M...\$139  
Matrox Millennium II 4M / 8M...\$219/319  
Monster 3D 4M oem/retail...\$219/269

Daytek 15" 1536/17" 1731...\$279/519  
KTX 15" 28 1280x1024 Digital...\$279  
Sceptre 15" P511/531 OSD...\$289/309  
SONY 15" 100ES .25...\$409  
NEC 15" A500/E500 .28...\$379/469

Acer 17" 76c/78ic...\$499/539/579  
NEC 17" A700/E700 .25 1600...\$649/919  
Samsung 17" 700S/700P 1600...\$619/839  
SONY 17" 200ES/200GS .25...\$769/899  
Viewsonic 17" V773/775 .26...\$589/699  
Viewsonic 17" G773/P775...\$669/769

### CD & Sound

BTC/Panasonic 24X CDROM...\$89/99  
Toshiba / Acer 32X CDROM...\$109/119  
Pioneer/Sony 12X/24X SCSI...\$139/169  
Plexor 32X UltraPlex Int SCSI...\$329  
Toshiba DVD ROM Drive...\$139

Creative Encore Dxr2 DVD Kit...\$389  
Toshiba DVD Kit...\$369

HP 7200i 6x2 CD-Rewritable w/ Ctrlr...\$549

Sony 926S/928E CD-Rewritable...\$439/459

Yamaha 4001T/4260 CD-Writer...\$579/669

TDK/KAO CDR Media 650MB...\$4

Sound Pro/Zoltrix 16bit PnP...\$23

SoundBlaster 16 / AWE 64...\$49/89

SoundBlaster AWE64 Gold...\$249

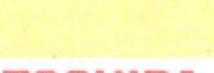
80/320W Multimedia Speaker...\$20/49

Altec Lansing 45/48 Power Cube...\$129/189

Yamaha M15/M20/SubwMT10...\$79/109/115

Tekram How-R-U VideoConf. Kit...\$209

Zoltrix Video Capture w/ Turner...\$99





**TOSHIBA**

Prices are cash  
discounted & subject  
to change w/o notice

### Coporate P.O. Welcome

3 year labor & 1 year parts warranty

Free Internet Setup & Access (1st Month)

Designated trademarks &  
brands are the property  
of their respective owners.

\*Lease Based On  
36mth, 10% Buyout

ATCRON is  
the first to offer Warranty  
Express Service In North America.  
You have same day service When  
you own any ACCO Systems at  
NO extra charge.

**U-robotics**  
The Intelligent Choice in Information Access

# eCharge adds Net buys to phone bill

Vancouver's eCharge Corp. has launched a new Internet marketing product that bills online purchases from participating merchants to a Web surfer's telephone bill.

The eCharge Billing System is designed for the purchase of downloadable items or for services that are measured in time. These categories include purchases of software, music, graphic art, books and informational files, or online gaming. According to eCharge, the billing system is also suitable for charities or educational facilities for fundraising, or selling course content or notes over the Net. Presently, the eCharge limit is set at US\$50.

"Shoppers weren't exactly flocking to the Net," said eCharge president, Rob Hutchison. "It was too complicated. We've made it easy. We're using the same 1-900 billing system that customers are accustomed to using when calling tech support help desks, such as the one Microsoft operates."

At this time, eCharge shopping is not available in Canada, but Canadian merchants can use the system to sell products or services to customers in the U.S. The eCharge service is expected to be available in Canada by the spring.

eCharge, <http://www.echarge.com>

## UBC, Roundhouse launch new computer lab

The Roundhouse Community Centre in Yaletown and the University of British Columbia Continuing Studies department have opened a high-tech computer lab in the Roundhouse in early January.

"This classroom marks the beginning of a new digital phase for the Roundhouse," according to Gerry Thorne, president of the centre's Community Arts and Recreation Society.

With the new lab, the Roundhouse plans to incorporate computer and Internet technology in courses, workshops and special events held at the centre. Since the Roundhouse is located in one of the most wired neighbourhoods in B.C., the lab is expected to generate considerable interest.

William Koty, manager of Internet programs for the UBC Continuing Studies expects the partnership to provide greater access to the department's courses. UBC Continuing Studies has equipped the lab with 15 Internet workstations in exchange for use of the location.

Concord Pacific and BC Tel have donated the fibre-optic Internet connection for the new lab. The lab will also be available for public rental.

For info on lab rentals or UBC Continuing Studies, call 822-1420

For info on the Roundhouse call 713-1800

## Digital Siren detector proves popular

A digital siren detector is proving to be a cost-effective and efficient safety feature in several communities throughout B.C., according to its Vancouver developer Sonic Systems Corp. The Sonem 2000 detects emergency vehicles as they approach intersections, and causes the traffic light to give the vehicle right-of-way. An oncoming siren is detected by one of four listening devices (or microphones) are attached to a traffic light. The sound is then converted to a digital signal that is relayed to a control card installed in the traffic controller. The traffic controller, a component of the traffic light, then pre-empts the light. The listening devices can be programmed to detect any of the common siren sounds.

According to Sonic Systems' Mike Krasny, the Sonem 2000 is faster, safer and more eco-

nomic than the radio-based systems or the light-activated systems currently in use. "The other systems require operator input, and can be effected by congested air waves or weather conditions. They also need special equipment to be installed in each vehicle, and this is costly."

According to the company, the Sonem 2000 can also communicate with distant traffic lights to clear the way for oncoming ambulances, fire trucks or police cars.

The detector is being used in Nanaimo, Mission, Squamish, Courtenay, and on the Island Highway, as well as in several U.S. locations.

**Sonic Systems,**  
<http://www.sonic-systems.com>

## Motion Works to specialize in effects

Vancouver's Motion Works Group Ltd. expects 1998 will be a year of big changes. In the last year, this full service "all media" production studio completed the *Cosmopolitan Virtual Makeover* CD-ROM for SegaSoft, *Anastasia: Adventures with Pooka and Bartok* for Fox

continued on page 13

## DISCOVERY MULTI-MEDIA

7966 Granville St (at W. 64th), Vancouver, Ph: 263-2377  
Over 800 Titles At Discount Prices

### Kid's & Reference

	Application & Utilities	Fun n Games
Adam-Inside Story	19 Borland C++ 5.0 Dev Suite	Call 3D Pinball Creep Night 24
Arthur's Birthday	24 Borland C++ Builder	69 7th Legion 34
Arthur's Teacher Trouble	24 Borland Delphi 3.0	89 Carmageddon 49
Body Works 6.0	22 Borland Paradox 7.0	44 Betrayal of Antara 29
Canadian Encyc 97 **	19 C++ Programming Tutor	29 Curse/Monkey Island 52
Compton's World Atlas	22 Corel Draw 8.0 Aca	174 Comm & Conq-Gold 34
Compton's Encyc 98	19 Corel WP Suite 7 Aca	34 Dark Reign *** 36
Crayola Art Studio	19 Free BSD 2.2.5	29 Diablo 34
DK-Encyc Nature 1.0 **	19 Hacker Kroniclez	27 Doom 2 19
DK-PB Bear Birthday **	14 Linux Resources *New*	29 Dungeon Keeper 44
DK-My 1st Amaz Animals	32 Lotus Smart Suite 97	54 Heavy Gear 49
Dr Brain, Time Warp	24 Master Technician 97	19 Hexen 2 39
Freddi Fish	22 McAfee Virus & WebScan	34 Jedi Knight 54
Grolier 98	19 MS SQL Server Training	127 Lands of Lore 2 34
Hello Kitty, Keroppi, Felix	9 MS Visual Basic 5.0	92 Larry Collection 2 39
Jumstart 1st Grade	19 Netscape Communicator 4.	24 Lords of Reim 2 24
Kid's Pix Studio	19 PC Electronics #3	19 Lords of Magic 49
Lego Island	39 Quicken 5 Deluxe	24 Nascar 2 29
Mega Math Blaster-2Cds	29 Red Hat Linux 5.0 Official	49 Need For Speed II SE 52
Mosby's Medical Encyc	17 Red Hat Power Tools*New	26 NHL 98 *Special* 46
Multipedia-16 Dictionaries	14 Dictionaries & Languages	Panzer General 2 ** 44
Muppet Treasure Island	22 Amer H Talking Dictionary	19 Phantasmagoria 29
Operation Neptune ***	17 Berlitz: Japanese	24 Quake 2 59
Putt-Putt Save the Zoo	24 French Vocab. Builder	16 Red Neck Rampage 34
Reader Rabbit's Reading	17 Learn Mandarin	24 RIVEN (Myst 2) 54
Reading Development ***	17 Learning Japanese	24 Shadow of Empire 49
Richard Scary: Busytown	24 Learn/Speak English-2Cds	29 Sim City 2000 SE 44
Story Book Weaver	19 Learn/Speak Spanish-2Cds	29 Tomb Raider *** 29
Treasure Cove	17 Sign Language Dictionary	24 Tomb Raider 2 52
Tuneland ***	17 Triple Play English	19 Total Annihilation 49
Widget Workshop	24 Triple Play French	19 Wing Comdr Prophesy 54
Yukon Trail	14 Triple Play Spanish	19 Zork Nemesis *** 18

\* For Titles Not Listed Call 263-2377

Add 0.95 to all sale prices

## Huge Shipment Unpacking!!!

# HALF PRICE



## COMPUTER BOOKS

RICHMOND #122-4940 No. 3 Road  
No. 3 Rd & Alderbridge, opposite Lansdowne

231-1922

BURNABY 4269 Lougheed Highway  
2 Blks West of Brentwood Mall (by Staples)

291-1033

### WEBSITE

<http://half-price.computer-books.com>

### FREE MAIL ORDER SERVICE



OPEN 7 DAYS A WEEK • TILL 9:00 WED, THUR & FRI

## SE Using MS Office 97

Suggested Price \$56.95

Our Price

\$28.48



## Efficient C/C++ Programming w/disk

Suggested Price \$53.95

Blowout Price

\$7.99



## Official Guide to Visual Basic 4 w/CD

Suggested Price \$59.95

Blowout Price

\$7.99



## SE Using Netscape 3/or Internet Explorer 3

Blowout Price

\$4.99

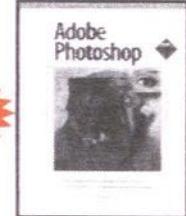


## Photoshop 3 (for Mac)

Suggested Price \$61.95

Blowout Price

\$14.99



# It's amazing what you can catch with a bigger Net.



## Get the big picture from the company that perfected it.

Cruise the "Net" on a ViewSonic G810 21" (20" viewable) monitor and you won't believe the incredible sights you can log onto. The flat square screen, 0.25 mm ultra-fine dot pitch and an optimum resolution of 1,024 x 768 at 109 Hz produce graphics that'll knock your socks off. At a price that's perfect for people who work at home with their shoes off.

Whether you're crunching numbers on a spreadsheet or crunching aliens on a CD-ROM, a Super Contrast screen makes it easy to focus. And along with being easier to watch, the G810 is easier to use. Windows® 95 *Plug & Play* + compatibility makes it a snap to install.

## More ways to get the space to explore cyberspace.

Check out the breathtaking 17" (16.0" viewable) display on the ViewSonic 17GS. Or admire the sound from the 17GA with built-in, high-fidelity stereo speakers.

Like the G810, they're backed by a limited 3-year warranty.

**For more information call  
(800) 888-8583 or log onto  
our website at [www.viewsonic.com](http://www.viewsonic.com)**

Because these are the big ones you don't want to let get away.

## What about refresh rates?

*Basically the higher the refresh rate the better. Refresh rates relate to how fast a monitor image is painted on screen. A 75 Hz refresh rate (the very minimum recommended rate) means the screen image is repainted 75 times per second. Higher refresh rates eliminate flickers that may cause eye strain. Sometimes, this flicker is not even perceptible, but it's there, causing eye fatigue. The ViewSonic G810 provides a phenomenal 109 Hz rate at 1,024 x 768 resolution.*

	17GA	17GS	G810
CRT Size (Viewable)	17" (16.0")	17" (16.0")	21" (20.0")
Dot Pitch	.27 mm	.27 mm	.25 mm
Horizontal Frequency	30-69 kHz	30-69 kHz	30-89 kHz
Maximum Resolution	1,280 x 1,024	1,280 x 1,024	1,600 x 1,200
Optimum Resolution	1,024 x 768	1,024 x 768	1,024 x 768
Refresh Rate	86 Hz	86 Hz	109 Hz
Macintosh® Compatible	Yes*	Yes*	Yes*
Windows® 95 <i>Plug &amp; Play</i> +	Yes	Yes	Yes
On-Screen Control	Yes	Yes	Yes
Limited 3 Year Warranty	Parts, Labor, CRT	Parts, Labor, CRT	Parts, Labor, CRT

\* Free Macintosh adapter available upon request.



ViewSonic G810  
January 1997



ViewSonic G810  
January 1997



ViewSonic 17GA  
April 1996



ViewSonic 17GA  
April 1996



**ViewSonic®**

# Have it all with multifunction machines

BY LYNN GREINER

These units, which combine, at a minimum, printing, convenience copying, facsimile, and scanning, offer a number of benefits to the space-challenged small office. First is the small footprint. In the desk space needed for a standalone fax machine, users get the functionality of several machines, often with a convenient interface that makes using and managing the gadgets a breeze.

But there are downsides to this type of portmanteau of usefulness. The biggie is, if one component breaks, the entire machine must go out for repair. You can't keep printing if you want the scanner fixed. A small office that must always have a printer available should supplement its multifunction box with an inexpensive single-function printer, even if it's just stuffed in a closet most of the time.

As you can see from the prices, these boxes range from the economical to "ouch!" Two of the units in our roundup are monochrome, the rest colour. The monochrome units use laser (or laser-like) technology, while the colour models use inkjets. This adds yet another wrinkle, operating costs. Inkjets are typically more expensive to run, needing pricey cartridges and special paper for decent output. The wrong paper can result in bleeding, smudging, or fuzzy characters. Inkjets are also considerably slower than lasers. It's a trade-off. If you really want colour output, then you put up with the inconvenience. Otherwise, you can opt for a monochrome unit (and there are several excellent ones besides the two we mention here) and save the aggravation and expense of the colour inkjet. Now, to our roundup:

#### Brother MFC-7000C

The MFC-7000C is a largish box compared to most of the others. It offers six functions: colour printer, colour copier, TWAIN-compliant colour scanner, plain-paper fax, colour PC fax, and message centre. It also has a jack you can use for direct input from a digital camera, camcorder, or VCR.

The inkjet printer is supplied from separate colour cartridges—one each of black, yellow, cyan, and magenta. This is an excellent feature, since it means you only have to replace the colour that's empty rather than having to replace a four-color cartridge when only one color has run dry. Speed is rated at up to 5 pages per minute (ppm) monochrome, and 3 ppm in colour.

The unit includes its own bidirectional parallel cable (all of these devices need one, not all include one), and a telephone handset. There's a 30-page document feeder, and

200-sheet paper tray. The copier enlarges and reduces originals, and can do up to 99 copies. Fax memory is 100 pages, and the message centre holds up to 50 minutes of messages.

The software bundle includes Visioneer's PaperPort scanning software, Xerox TextBridge OCR (optical character recognition), InfoImaging 3D fax software, Corel PrintHouse, Kai's Power Goo SE, and My Marketing Materials. PrintHouse and Power Goo are Windows 95 only, while the rest (and the unit) will work with Windows 3.1x.

Print quality is quite acceptable, although it was a bit of a skirmish to persuade the unit to output pages in the correct order (default is



Brother MFC-7000C

face-up, in reverse order). Faxing and both colour and monochrome copying can be done either from the computer, or directly from the unit's control panel. But don't lose the manual—programming this box is not intuitive!

#### Canon MultiPASS C5000

The MultiPASS C5000 reduced me to some very bad language, not because it's

a poor-quality printer, but because its installation program managed to aim its printouts at Hijaak Print Capture, a utility that grabs bitmaps of printouts and stores them to disk rather than printing them (telling the machine to bypass spooling solved that problem). Once I induced it to print, quality was reasonable, but a colour copy of a print of a grey cat on a beige floor gave me a rather pink kitty on a reddish floor.

The MultiPASS offers colour printing, colour copying, colour faxing, and a TWAIN-compliant colour scanner, for

Windows 95 only. It's a small contraption, only a tiny bit larger than a normal Canon inkjet printer. It comes with two cartridges: a colour cartridge (with a black reservoir), and a plain black cartridge. Speed is up to 5 ppm monochrome and 2 ppm in colour.

The paper tray holds 100 sheets of plain paper or 50 transparencies. Fax memory is 42 pages, and the copier will do some reduction (monochrome only), and up to 99 copies. You can fax or copy from a PC or directly from the printer.

The software is extensive, but intrusive. The Desktop Manager and Pagis Document Manager plonk their toolbars on the desktop whether you like it or not. Scanning is handled by ScanGear. A



OkiOffice 44



Hewlett Packard OfficeJet 635

bonus Canon Creative 3 CD-ROM includes goodies such as ColorDesk Photo, Design Essentials, CreataCard SE, Color Store, WebRecord, Starfish's Internet Utilities 97, and AT&T WorldNet Internet service, plus a whack of stock photos, clip art, and graphics.

#### Hewlett Packard OfficeJet 635

The OfficeJet 635 is also a little guy, barely bigger than an inkjet printer. Unlike the other colour units in this roundup, it has a power switch, a feature that endeared it to me right from the start. I like to choose whether to leave a device turned on, not have the decision forced on me. It also has a solid, flat plastic output tray rather than the narrow bent wire trays offered by the others.

Functions include colour printing, colour copying, and colour scanning. Print speed is up to 5 ppm monochrome and 2 ppm colour. The input tray holds about 150 sheets, and

the document tray 20 sheets. Copies may be reduced or enlarged, and the machine can produce up to 99 copies of an original. But, like any inkjet, it does this slo-o-o-wly, so it's not a good idea to try!

HP supplies sleeves you can tuck photos and other small fiddly objects into for scanning so they won't get munched. Colour and monochrome scans and printouts come out well (although I noticed occasional banding in solid-black areas), and the user interface is clean and easy to navigate. The unit can share a phone line with an internal PC modem, or an answering machine, or voice mail, and simple installation instructions ensure you plug the right pieces into the right spots.

#### Konica 7410 Plus

The 7410 Plus is, as you can tell from the \$4,585 price, in a much higher tier than the other units. It's the only true laser of the bunch, a rock-solid monochrome monster that outputs at 12 ppm. It's a great copier and plain-paper fax (which is probably how it started life) that has had PC connectivity grafted on at a fairly significant price. It has smarts, too—when it jams, it knows enough to redo the damaged page. But all of its scanning and PC functionality is

in the form of additional cost add-ons—our test unit had the \$1,260 PostScript/PCL Kit, the \$140 Class 1 Kit for serial printing, scanning, and PC faxing, and a \$400 memory upgrade. And it costs another \$65 for TWAIN compliance.

Print quality is laser sharp. There's a standard 70-page fax memory, a 250-page input cassette (you can add an optional 500-sheet tray), and a 30-page document feeder. Oddly enough, output is face-up, which means the pages come out in reverse order and must be manually recollected.

#### OkiData OkiOffice 44

The OkiOffice 44 has taken the up to 4 ppm LED print engine from the OkiPage 4W and wrapped it in a package that includes faxing, copying, and TWAIN-compliant scanning (all monochrome). The unit is medium sized, at 31.2x39x19 cm (12.3x15.3x7.5 in.), and weighs only 6.75 kg (16 lb.). Like most of the inkjets, it lacks a power switch.

The setup was straightforward, with one exception—you have to remove the drum to get at some packing materials, and the instructions on this are terrible. The machine attaches to the parallel port using an included cable, although it assigns to pseudo COM

continued on page 15

## COMPUTER PLAYER!

PLAYERS  
PLAYERS  
PLAYERS  
PLAYERS  
PLAYERS  
PLAYERS  
EDITOR'S CHOICE

**Hewlett Packard's new OfficeJet 635**, with its easy-to-use software, high-quality output, and trouble-free operation, is our pick for the Editor's Choice. At a reasonable price, you get all of the functionality you could want, wrapped up.

# Long distance video phone for the price of an internet connection!



- Talk for hours to relatives overseas
- Show Grandma your baby's first steps
- See your kid's new haircut - at college
- Show exciting new promotions to clients
- Meet internet friends - without the guess work

**60 DAY  
ON-THE-SPOT  
REPLACEMENT  
WARRANTY**

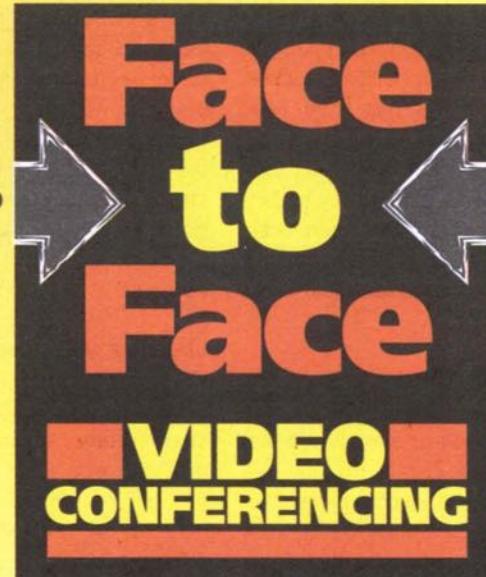
See authorized dealer for details.

## Zoltrix Face 2 Face Video Conference kit includes:

- Toshiba video camera
- BT-848 video capture kit
- Plantronics head set
- AC adaptor
- Cables and manual

**PLUS**

- VDOPhone professional software

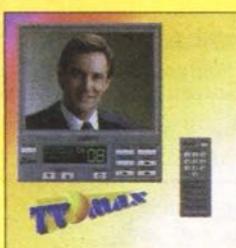


**One Kit  
\$199**  
Suggested List Price

**Two Kits  
\$389**  
Suggested List Price



FM Radio Receiver



TV Tuner Cards



Stereo Sound



56K Flex Modems

For superb value in multimedia/communications technology, visit an authorized Zoltrix dealer near you:

Burnaby	Acco Computer	604.570.0330	Richmond	.Powersonic Computers	604.214.9316
Comox	Viking Computer	250.339.7866	Sardis	.MS Computech	604.858.8337
Coquitlam	Avanplus Computer	604.942.9633	Surrey	.Walnut Grove Computers	604.888.3873
Coquitlam	Elitech Systems	604.931.5809	Vancouver	.3J Computer	604.323.9815
Mission	Bargain Bytes	604.826.8298	Vancouver	.Microworld Computers	604.899.1590
North Delta	.Strider Computer	604.543.4200	Vancouver	.Nantron Systems Ltd.	604.253.1588
Richmond	.Addax Computer	604.244.0793	Williams Lake	.IMS Computer	250.392.4675
Richmond	.Multilink Computers	604.278.6805			

**Zoltrix**  
Leading the world in communications technology

Buy one or two Zoltrix Face 2 Face Video Conferencing Kits and get a rebate directly from the manufacturer. Mail this coupon along with a self addressed stamped envelope and proof of purchase to:

ZOLTRIX REBATE c/o 3D Microcomputers  
150 Bullock Drive, Markham, ON L3P 1W3.  
Offer expires March 31, 1998

## Manufacturer Rebate

**\$10      \$30**

see one of the authorized dealer above for details

Your Name			
Address			
City	Province	Code	
Telephone			
Dealer name			
<input type="checkbox"/> One Kit <input type="checkbox"/> Two Kit			

# digital workforce

## Working at home?

### Set it up right

BY LEE LESTER

**S**o, you're on your own. Worrying, but thrilling. Exciting, but possibly risky. For the decisions you take now may well decide your success or failure, happiness or despair.

When you start out, safeguarding every penny is a top priority. You no longer have a company credit card and your copper handshake won't last very long.

You need a cost-efficient way of controlling expenses and inventory, budgeting income against expenditure, and keeping track of potential clients. Assessing what your needs are beforehand makes building a home office a lot easier than you might think.

#### Where to park

First you need a place to put the computer. And somewhere to put yourself when you're at the computer.

Okay, down to basics: your seat. Like everything else, you get what you pay for. While you may get by with an Activa SuperBlaster 286 computer, get the most comfortable chair you can afford. Your back will thank you. It will let you know if you haven't.

The seat should adjust for height and tilt. Adjustable lumbar support is a real plus. Adjustable armrests may help prevent back and shoulder pain by providing forearm support. Prices range from \$250 to \$500 new

(second-hand outlets often have good stuff for much less).

**T**ip: get a plastic mat to go under your chair. Rolling around will soon wear out your carpet or scratch your parquet if you don't. Price: about \$30.

**D**esk? My first working surface, after the kitchen table, was an old door supported at each end by a stack of flue liners. Again, second-hand may do nicely, though office equipment stores may say otherwise.

A fancy desk and other furniture may do wonders for your morale, but your home doesn't have to look like a corner of a corporate heaven. And who's going to visit you while you work? So watch out for specials. Prices for new furnishings rise from \$120 right up to the stratosphere.

A desk by itself may not be what you really need, however. A workstation may be better. Do your paperwork on the main desk, then swivel back and forth to your computer located on the return, the extension that sticks out at 90 degrees.

#### Keep it tidy

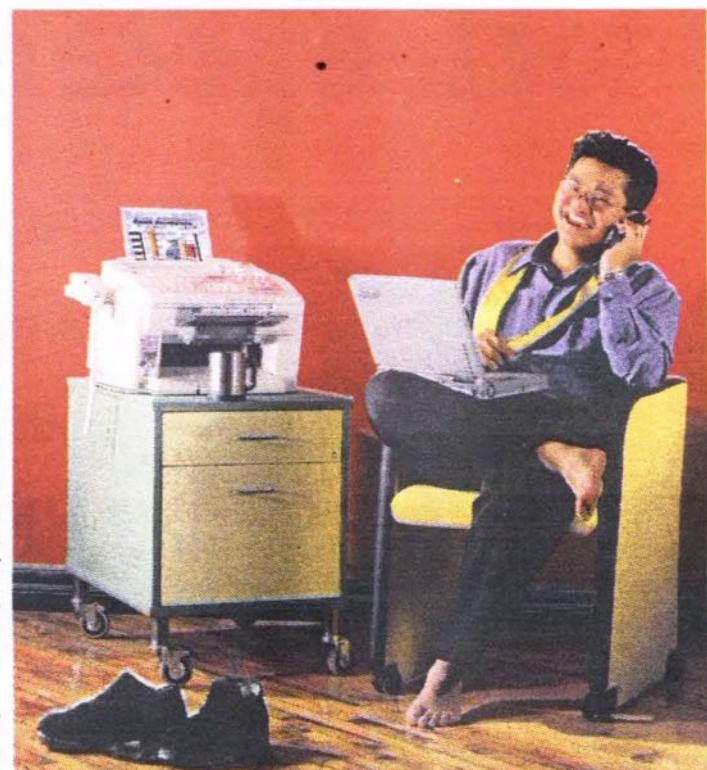
Ask whether a hutch (a desk-top unit containing a number of open or closed sections) is included in the price. If not, it could add hundreds of dollars to your accounts payable. The hutch can help you maintain a tidy work environment, which is priceless for some people. Cost of workstation: from \$100 up to the stratosphere again.

You don't need a new filing cabinet (\$120-\$180). Second-hand models shouldn't be hard to find. A bookcase for bulky folders and software, as well as books, is a good idea, and may set you back \$50 (or much more). My first office bookcase consisted of several planks sitting on cinder blocks at each end. I used it for years.

**T**ip: a pull-out computer keyboard shelf that rests under a desk is great, but not without space for a mouse pad. Otherwise, the pad takes up needed space on the desk. You'll quickly get tired as you constantly lift and lower your hand from keyboard to mouse. Make sure they're both on the same level. Your arm and wrist will thank you.

#### Choosing your tools

The computer itself? What you do will decide your choice. If you're into heavy graphics or engineering, settling for an entry-level machine won't cut it. If you mainly word process, a used machine as old as ten years may be enough. My daughter finished her degree in 1996 pounding out essays on a 1987 Macintosh SE. Today, a basic 166 MHz MMX machine with monitor and 24x CD-



ROM drive plus 33.6Kbps fax modem will still leave change out of \$1,400.

When you're in business, you use your computer all the time. Ensure that the place you buy it from will service it in the event of computer problems. Saving a few bucks by installing new peripherals yourself is nice, but not if it swallows up hours that could be spent earning income.

**T**ip: make sure all the necessary components are included in the price. Some places charge extra for Windows 95, for example.

Monitors? It's amazing that most monitors can only turn and tilt. Try to get one that allows you to adjust the height precisely to

*continued on page 13*

## the Newton store



### MessagePad 2100

- 8MB RAM / 8MB ROM
- 160 Mhz
- Web-Browsing
- Word Processing
- Email
- Spreadsheet
- Connect to Windows and Mac

### clearNET PCS



## the PalmtopShop



**3Com Pilot Personal Pilot Professional**  
• Backlighting  
• Modem Connection  
• Email Capable  
• Upgrades available

### Garmin GPS III

- Built-in Maps

The PalmtopShop NOW OPEN in the Toronto, Montréal and Vancouver Newton Stores!

### REX



- Credit Card Size
- Synchronize to Windows

### Windows CE 2.0 COLOUR!



### HP 620LX

ALSO FEATURING:

Windows CE 2.0  
PHILIPS VELO 500

### TORONTO

140 Adelaide St. East, Ont. M5C 1K9  
The Newton Store: 416.361.0446  
The PalmtopShop: 416.361.3443

### VANCOUVER

1251 Pacific Boulevard,  
British Columbia V6Z 2R6  
604.899.0425

### MONTRÉAL

450, Ouest Blvd. René-Lévesque  
Québec H2Z 1Z6  
514.954.1308



[www.newtonstore.com](http://www.newtonstore.com)

[www.palmtopshop.com](http://www.palmtopshop.com)

# digital workforce

## Working at home?

continued from page 12

your own requirements. Your neck and shoulders will thank you.

Go for the largest screen with the smallest dot pitch you can afford. Your eyes will thank you.

Printers? Inkjets are good; lasers are better. Some now sell for only \$250. Unless you need colour, you'll save money with a black and white laser, which prints pages much more cheaply than an inkjet.

Software? Get only what you need. A full office suite isn't worth it if you only word process—you don't need the high-powered presentation graphics module. And if you only have a few appointments, you don't require elaborate scheduling software.

Keeping accounts current is essential. Get a program you can understand, not necessarily what your accountant recommends, although it must satisfy Revenue Canada requirements. My favourite: Best!Ware's MYOB Accounting (\$99). If you are a Macintosh user, it's the only accounting program for you.

Working in sales? Software that enables you to search for potential clients by address, phone number, or type of business is indispensable. Pro CD's Select Phone Canadian Edition does all that and more. It'll even dial a selected number for you. You could say that you can't stay at home without it. The 1998 version sells for US\$79; with a half-year update, \$119.

## BC news briefs

continued from page 8

Interactive, and a special effects contract for the feature film *Laserhawk*.

"It was a good year, but we think we can do better," says studio president Don Gray. "We are moving our interactive and online creative development to Toronto, and will focus our Vancouver studio on post production and special effects for film and television. The new development team, to be located in Toronto, will begin working on the US\$1.5 million Jack Nicklaus interactive golf tutorial project."

Motion Works has signed a \$3 million contract to begin production of a TV series for a large U.S.-based producer. This work will be done in the Vancouver studio.

"This reorganization will allow us to focus our post production resources in British Columbia under the guidance of industry veteran John Lambert. At the same time, we will establish our interactive and online team in Toronto where we can take advantage of provincial tax credits and a huge talent pool of graphic artists and designers," Gray said. **Motion Works**, <http://www.mwg.com>

June Campbell is a writer and the owner/operator of Nightcats Multimedia Productions, and can be contacted by email at [campbel@istar.ca](mailto:campbel@istar.ca), or by phone 604-980-3261 during business hours.

## Line dancing

If you get a lot of faxes or phone calls, a separate line is essential. But do you need a separate fax machine? Or will your computer

do? It's a question of quantity. A lot of faxes will soon exhaust the space on your hard drive, so a fax machine is a must. With only a few faxes, your computer is all you need.

And you'll save some money by not printing out everything you get, only what you choose. Oh, you'll need one more thing—luck. Lots of it! ♦

## With CompuServe's Flat-Rate Plan, YOUR ONLINE TIME NEVER EXPIRES.



**Try it Free  
For 30 Days!**

When you're online with CompuServe Unlimited, the only reason to look at your watch is to check if it's time for bed. Because, with CompuServe's Flat-Rate Plan you can be online as often and as long as you like, for one low monthly fee.

So, whether you're parked on the Internet downloading the hottest new video game, navigating CompuServe's exclusive databases to research your special interests, chatting with like-minded individuals about your favourite topic, or just online surfing for the sheer adventure of it, this timeless Flat-Rate Plan means you don't have to worry about extra connection charges. Ever.

Why settle for just the Internet? With CompuServe, you get unlimited, high-speed Internet access, easy-to-use e-mail, plus more than three thousand exclusive online areas, forums and services.

**First 30 days FREE**  
**1-800-487-0952**  
**\$24.95\* US/MO.**  
Unlimited hours on  
CompuServe and/or  
the Internet

© 1997 CompuServe Incorporated. All rights reserved. CompuServe, CSI, and the CSI logo are trademarks and service marks of CompuServe. \*The CompuServe information service is available through a local telephone call to the CompuServe network in: Calgary, AB; Edmonton, AB; Halifax, NS; Hamilton, ON; London, ON; Kitchener/Waterloo, ON; Montreal, PQ; Ottawa, ON; Quebec City, PQ; Regina, SK; Saskatoon, SK; Toronto, ON; Vancouver, BC; Victoria, BC; and Winnipeg, MB. Outside these areas long-distance charges may apply. Visit our World Wide Web Page at [www.compserv.com](http://www.compserv.com). Online usage subject to the terms and conditions available online at sign up.

**PC MAGAZINE EDITORS' CHOICE**  
May 6, 1997  
CSI (CompuServe) 3.0

**"Providing the best of both worlds, CSI... delivers what we have come to expect from an online service while giving us complete and easy access to the Internet and so earns our Editors' Choice award."**

— PC Magazine, May 6, 1997

Want more? CompuServe lets you access your account locally from around the world. And you get unparalleled customer service and technical support, parental controls on adult content, and comprehensive Canadian content and services. All for just \$24.95\* US/month.

It's no wonder PC Magazine chose CompuServe as the best online service available. Try CompuServe free for 30 days and decide for yourself — just call 1-800-487-0952 for your free CompuServe software.

**CSI**  
**COMPUSERVE**  
The Internet...  
and a whole lot more!

# digital workforce

## Home office furnishing: Champagne dreams on diet-soda budgets

### info

IKEA Canada  
Tel: 604-273-2051  
Steelcase Canada  
800-333-9939, ext. 257

BY S.J. ROSS

In furnishing the small or home office, (SOHO), there is a constant struggle between the ideal situation and the painful reality. Ideally, your budget would allow you to purchase office furnishings that are as beautiful as they are ergonomic. But in reality, most of us have champagne dreams

clouded by a diet-soda budget.

But curiosity begs the question: How would you furnish a home office if you had a generous budget? Conversely, how would you furnish your office if you had a restrictive budget? And how would the two office furnishings compare?

Although both companies offer products at a variety of prices, we asked Steelcase Canada and IKEA Canada to develop one SOHO furnishing package each: Steelcase based on a \$10,000 budget and IKEA based on a \$1,000 budget. For those with a champagne budget, the Steelcase package will help you prepare your shopping list. And, for those with a diet-soda budget, the IKEA suite demonstrates how to squeeze every last dime of value from limited dollars.

#### On the case

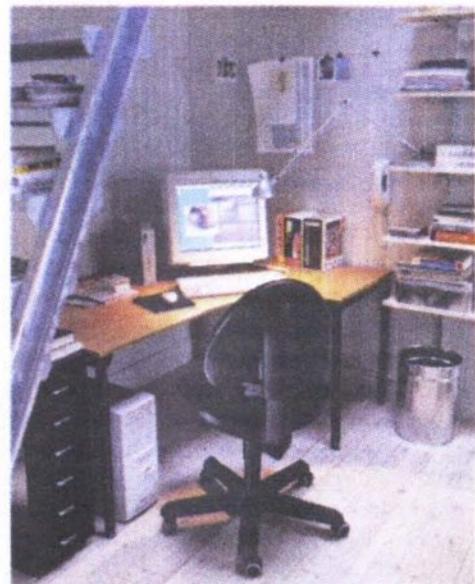
The Steelcase package totals \$12,144—

\$2,144 more than the allotted \$10,000—but since this reflects the suggested list price, retailers may sell items for less.

Steelcase selected the high-back Rapport chair (\$1,319). Fully adjustable, you can alter the seat height and tilt, back angle and tension, as well as move the lumbar pillow up or down; optional arm height and width adjustability is also available. This sturdy chair is particularly good for users whose daily tasks include a range of activities.

According to ergonomist Anne Duffy, of The Ergonomic Approach, "It has all the features we like to see in a chair and the lumbar pillow is very good, but I wouldn't spend this much money unless you had special back needs."

The furnishings are from the Relevant suite in the Broadmoor line. Selected items include a veneer slip fit (a handy feature allowing you to slide a drawer unit under your desk); a



28.5-inch-high end panel with an extended corner work surface (\$1,834); a veneer left-hand bread-board work surface (\$275); and an overhead binder bin with a veneer front and top (\$2,036). The selection also includes an open veneer hutch (\$1,208), a veneer tallboy with a single door and two files (\$3,001), and a veneer low boy (\$2,471).

The pieces are available in all types of

continued on page 15

## RPC ( Sales, Repair & Upgrade )

Prices subject to change without notice. MasterCard, VISA Payment Accepted

### RPC SYSTEMS

P166mmx \$1350  
P200mmx \$1400  
P233mmx \$1520

Free 1 Month  
Internet Access

Pentium-II  
\$1890 (233Mhz)  
\$2080 (266Mhz)  
\$2340 (300Mhz)

Intel Pentium-II Processor  
ASUS P2L97 Motherboard (440LX)  
32MB SDRAM  
1.44MB Floppy Drive  
3.2GB Ultra DMA Hard Drive  
2 Serial, 1 Parallel, 1 Mouse Ports  
ATI 3D EXPN+V. Card W/ 4Mb  
Win-95 Keyboard, Logitech mouse  
24X Speed CD-Rom (Panasonic)  
SB16 Sound card & 2 Spkrs  
33.6K Fax/Modem w/ Voice  
15" SVGA Monitor  
19" ATX Case & 250W Power  
2 Years Warranty

MONITORS  
Daytek 14" NI SVGA .28  
Komodo 15" NI LR Flat SVGA .28  
Sceptre 17" LR Flat Screen NI SVGA  
ADI E40 15"  
NEC A500 15"  
NEC A700 17" (special)

\$210  
\$270  
\$620  
\$365  
\$389  
\$699

### MULTIMEDIA

16 bit sound card & 24x CD-ROM	\$146
60 Watt Power Speakers	\$20
120 Watt speakers	\$39
AW32 Pro w/wave table sound card	\$59
Sound blaster AWE 64 P&P	\$129
Discovery Awe64 24x kit	368
16 bit Sound Card	\$38
Sound blaster 16	\$68
Panasonic 24x Speed CD-Rom	\$108
Yamaha CD Writer, 4x write, 6x read	\$595
Adaptec SCSI CD-Rom Cntrlr w/ Software	\$85
Video Conferencing Kit	\$239

### MOTHERBOARDS

ASUS P-166mmx 512K w/cpu, fan	\$310
ASUS P-200mmx 512K w/cpu, fan	\$360
ASUS P-233mmx 512K w/cpu, fan	\$470
ASUS Pentium-II M/B & 233 CPU	\$700
ASUS Pentium-II M/B & 266 CPU	\$880
ASUS Pentium-II M/B & 300 CPU	\$1140

Please visit our Web-Site  
[www.rpc.com](http://www.rpc.com)  
for latest prices

### SMALL BUSINESS ACCOUNTING SOLUTIONS

NOVELL / WINDOW-NT NETWORK INSTALLATION  
VIGILANT ACCOUNTING SOFTWARE INSTALLATION  
POINT OF SALE EQUIPMENT INSTALLATION

### Printers & Scanner

Okidata OL-4W Laser 600dpi	\$299
HP 670C Color Deskjet	\$288
HP 692C Color Deskjet 600dpi	\$325
HP 722Cxi Color Deskjet 600dpi	\$485
HP 890Cxi Color deskjet 600dpi	\$620
HP LaserJet 6L 600dpi	\$550
HP LaserJet 6P 600dpi	\$1020
HP LaserJet 6MP 600dpi	\$1240
HP LaserJet 4000	\$1590
HP LaserJet 4V/4MV	\$2580/\$3690
Canon BJC-4300	\$299
HP-5S Scanner	\$279
HP-5100 Scanner	\$395
HP-6100C Scanner	\$1070

### We repair :

-Monitors  
-Systems  
-Printers



We are a member of  
Better Business Bureau

### DRIVES & CONTROLLERS

2.1GB Ultra IDE	\$205
3.2GB Ultra IDE	\$270
4.3GB / 6.4GB Ultra IDE	\$320/\$430
3.2GB / 4.3GB Ultra SCSI	\$380/\$440
6.4GB Ultra SCSI	\$555
2.5" 1.3GB IDE for notebook	\$330
1.44MB 3.5" Floppy Drive	\$32
Iomega 2GB tapebackup	\$180
Backpack 800mb parallel port backup	\$195
Seagate 4.0G Int/ext.Dat tape backup	\$960/\$1130
Seagate 8.0G Int/ext.Dat tape backup	\$1220/\$1350
VLB EIDE Controller W/ Multi-I/O(used)	\$29
VLB EIDE Cntrlr w/ Enhanced I/O(used)	\$35
Adaptec 1520 SCSI Controller	\$105
Adaptec 2910B SCSI Controller	\$149
Adaptec 2940/2940UW PCI SCSI Cntrlr	\$295/399

### CD-ROM Mastering & Duplication

Price Started from \$15+tax

Source: CD, HardDrive, Zip & Jazz Media,  
120-800MB Tape (Qic-80)  
2.0G-8.0G 4mm DAT Tape

Phone or visit our Web-Site for pricing

## RPC

Computers Ltd.

1796 Renfrew St.  
Vancouver, B.C.

(604) 255-1192

Fax: (604) 255-0002

[www.rpc.com](http://www.rpc.com)

Mon.-Fri. 9:30-6:00 \* Sat. CLOSED

# digital workforce

## Home office furnishing ...

continued from page 14

wood (walnut, cherry, maple, and oak), wood and laminate, or all laminate. The tables can either have castors or glides, and the pieces are attached with stability clips to allow for reconfiguration.

"The only ergonomic adjustability in this workstation is in the chair," says Duffy. "With this setup you need to have an articulating keyboard arm that offers some height adjustability, but the lip on the bottom of the working surface may interfere with this."

On the plus side, (beyond the suite's obvious beauty), the furnishings offer generous work surface space, flexibility (the slip fit feature allows for the expansion and shrinkage of surface work space as needed), and an abundance of storage space. On the downside, there is no keyboard drawer pullout unit and no task lighting, footrest, or other optional items (though Steelcase does offer some excellent accessories at an additional price).

## How Swede it is

Alternatively, IKEA managed to fill a small office with furnishings totaling only \$994.95, leaving just enough money to

## Having it all

continued from page 10

ports for faxing and scanning. Paper is fed in and output to the same printer-top tray, which holds 100 sheets. The driver was a bit cranky about output order; sometimes recollating face-up pages correctly, and sometimes not.

It can produce up to 50 copies per original (full-size, reduced, or enlarged), and copy quality is excellent (it may use LEDs, but this machine outputs like a laser).

## Xerox WorkCentre 450c

The WorkCentre 450c is an attractive unit that offers colour printing (up to 4 ppm monochrome, 1 ppm colour), and monochrome TWAIN-compliant scanning, faxing, and copying (up to 99 copies per original; it enlarges and reduces). The input tray holds 150 sheets, the document feeder and output tray 20 pages each.

Print quality is good, especially with text, but the printer drivers under Windows 3.1 are fractious. In tests, they kept quitting after printing a single page, or generating "cartridge error" messages that sometimes annoyed the PC enough to require a reboot. As a standalone fax or copier, though, the 450c behaved flawlessly.

Separate ink reservoirs for each colour save money, and the Xerox ControlCentre software shows you how much ink is left in each, a nice touch that can prevent nasty surprises in the middle of an important job.

Xerox includes a collection of software for Windows 3.x and 95, including Page Pro 97, TextBridge Pro, Xerox PerfectScan, WinFAX Lite, and Verity's Topic Search Engine. They also throw in a bidirectional parallel cable. ♦

purchase a handful of pencils.

The most expensive item (\$299), the beech veneer desk, was selected from IKEA's Effektiv line of business furnishings. Ideal

for corner placement, the small, L-shaped desk measures 160 cm long, and is 120 cm deep on the right side and 80 cm deep on the left. Finishes range from beech or oak veneer

to white melamine with black or silver lacquered legs, which are height adjustable from 67-75 cm.

continued on page 16

# Golden Top Super Sales!

## MONITORS

<b>PHILIPS</b>
<b>21" SVGA... \$1200</b>
<b>20" SVGA... \$900</b>
<b>17" SVGA... \$425</b>
<b>15" SVGA... \$225</b>
<b>14" SVGA... 149</b>
<b>CALL FOR DETAILS ON BRILLIANCE MONITORS</b>
<b>KTX</b>
<b>17".26 DPI... \$579</b>
<b>17".28 DPI... \$549</b>
<b>15" SVGA... \$298</b>
<b>VOXON</b>
<b>14" SVGA... 189</b>

## MEMORY

<b>72 PIN SIMM</b>
<b>16MB... \$50.00</b>
<b>8MB... \$25.00</b>
<b>4MB... \$12.00</b>
<b>30 PIN SIMM</b>
<b>4MB... \$20.00</b>
<b>1MB... \$5.00</b>
<b>MODEM</b>
<b>COMSTAR</b>
<b>33.6D-F-V... \$68</b>
<b>KTX</b>
<b>33.6D-F-V... \$72</b>
<b>ACER</b>
<b>56KD-F-V... \$99</b>

## CD-ROM

<b>4X</b>
<b>MITSUMI... \$59</b>
<b>24X MAX</b>
<b>ACER... \$99</b>

## SPECIAL KEYBOARD, MOUSE AND MID TOWER ONLY... \$55

## SPEAKER

<b>TSUNAMI</b>
<b>60W</b>
<b>ONLY \$16.99</b>
<b>S3 VIDEO</b>
<b>TRIO 64V+ \$35</b>
<b>VIRGE 2MB \$55</b>
<b>VIRGE 4MB \$75</b>
<b>PHOTO MAKER</b>
<b>30BIT FLATBED SCANNER</b>
<b>ONLY... \$179</b>

All prices subject to change without notice

We are located @ 10269 128th Surrey B.C inside Super 8 foods. Tel: 581-4698 Fax: 581-8382

# Golden Top Computers

Contact us on the Web @ [www.goldentop.bc.ca](http://www.goldentop.bc.ca) or e-mail us @ [goldents@axionet.com](mailto:goldents@axionet.com)

# digital workforce

## The origami office

### info box

Console: available at Eaton's, Tel: 604-661-4570  
 Esbern and Kavaljer: available at IKEA, Tel: 604-273-2051  
 Zaap: available at New Look Office Interiors, 604-738-4414

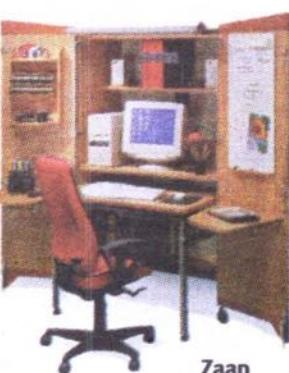
**A** trend unfolding among home office furniture designers is closet-like units that open up to reveal self-contained workstations, which are folded back up and tucked away at the end of the work day. They allow for dual use of limited space, such as an office area in a small home, or they can create a defined work space in a larger open area, such as a loft or warehouse.

IKEA makes two basic versions of this type of unit, the Kavaljer and Esbern. Of the closet offices we looked at, these are the most compact and the easiest on the wallet (the

Kavaljer ranges from \$499 to \$529, and the Esbern is \$249). They also have the least amount of storage space and the smallest work surfaces, however.

The LinkWorks' Console (available at Eaton's) and Kinnarps' Zaap (from New Look Office Interiors) both include fold-out tables that double the work surface. They have their own light sources (currently an extra cost for the Zaap, but this may change, according to New Look), as well as storage space in the doors, memo boards, and locks. These extras come at a price, however: the Console is \$2,199 and the Zaap \$3,995.

Console offers a roll-out file cabinet for an additional \$299, but since this unit already has the most storage capacity, you may be able to delay the purchase of an extra drawer.



The Zaap, the most deluxe of the lot, is also the most self-contained. The doors are slightly peaked to enclose a chair when the workstation is shut. The Zaap has a finished back and a cable duct running the length of the interior, so the unit does not have to be placed against a wall because of unsightly cords or rough surfaces. It is also the only unit with wheels, making it ideal for larger open spaces, or settings where mobility is important.

The one thing that detracts from this unit is the awkward method of adjusting the keyboard surface height. Although it works smoothly, the metal crank that must be inserted in the table top looks out of place with this sleek design. The crank is also detachable—meaning it can be misplaced.

—Megan Johnston

**Home office furnishing ...**  
 continued from page 15

Available in an extensive variety of mix-and-match sizes, with the option to add or remove components according to your budget and needs, the series offers excellent flexibility. While the adjustable legs allow for some ergonomic maneuverability (and come in handy for uneven floors), the lack of a keyboard pullout shelf is a serious drawback. (Although the Effektiv line does not offer a keyboard pullout unit, it does offer an adjustable monitor stand for \$199.95).

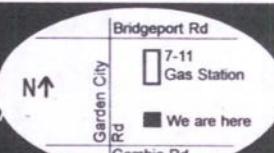
"This desk offers the same problem as the Steelcase desk, since the keyboard is on the same surface as the monitor," says Duffy. "But the curve of the desk is good in that it allows you to move the monitor forward and back."

Like the desks, the Effektiv storage units are available in a variety of mix-and-match sizes offering everything from drawers and shelves to roll-top fronts and quarter moon-shaped shelving units, which are ideal for corner placement. IKEA's two-level Effektiv beech veneer storage unit

continued on page 17

### GAMES LOVERS' LIBRARY

140-9020 Capstan Way Richmond, B.C. Tel/Fax: (604) 270-7111  
 (one block north of Cambie on Garden City, next to 7-11)  
<http://www.jvb.com/gameslovers>



#### Video

S3 1M	\$40
S3 Virge 2M EDO	\$55
ATI 3D Xpression 4M	\$110
ATI Xpert@Play 4M	\$230
Matrox Mystique 4M	\$145
Millennium II 4M/8M	\$225/\$325

#### Modem

Acer 33.6K int. Voice	\$70
Acer 56K int. Voice	\$125
Creative Lab 56K	\$145
USR 33.6K Int/w Voice	\$115/\$135
USR 56K Int/w Voice	\$200/\$225

#### Hard Drive

Fujitsu 2.1G	\$210
2.6G	\$225
3.2G	\$265
4.3G	\$290
5.2G	\$360
6.4G	\$415

Quantum 2.1G	\$210
3.2G	\$260
4.3G	\$295
6.4G	\$400
8.4G	\$530

#### Quality Pre-Owned Systems

• Intel 166	• Intel 150
16MB	16MB
1.44M FD	1.44M FD
1.28G HD	1.08G FD
1M Video	2M Video
12X CD Rom	12X CD Rom
16 Bit Sound	16 Bit Sound
KB, Mouse	KB, Mouse

**\$620** **\$588**

Other configuration available, please call!!

Pre-owned monitors available  
 Price from \$120

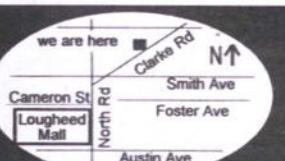
#### Express Micro System

PII-233	64M SDRAM
S3800	Quantum 8G Ultra ATA HD
PII-266	Millennium II 8MB Video
S4000	Sigma Design DVD Drive & Mpeg 2 Decoder Card
PII-300	C.U.C.U.S. Video Conferencing Kit
S4500	Panasonic 24X CD Rom Drive
PII-333	SB AWE 64 Value Sound Card
SCall	Sonlab Subwoofer W/Satellite Spks
	Motorola 56K Int. Voice Modem
	LS120 120MB Super floppy
	Full Tower
	Fujitsu 4725 KB
	Microsoft IntelliMouse
	Microsoft Windows 95 w/CD
	Corel Office Pro 7.0W/Corel Draw 6.0

5 Years labour & 3 years parts Warranty

### COMPUTER LOVERS' CENTRE INC.

Unit 2-555 Clark Road Coquitlam B.C. V3J 3X0  
 Tel: (604) 931-8368 • Fax: (604) 931-8396  
<http://www.computerlovers.bc.ca>



#### Game Net System

**P166 MMX**  
**\$888**

**P233 MMX**  
**\$1050**

**PII 233**  
**\$1250**

- 32MB EDO Ram
- 2.6G Ultra HD
- PCI 1M 64 Bit Video Card
- 1.44 M Floppy
- 12X CD Rom Drive
- 16 Bit 3D PNP Sound Card
- 60 Watts Speakers
- 33.6K Int. VoiceModem
- Mid-tower case
- 104 Win 95 Keyboard
- 3 Button Mouse

#### Games Lovers' Library (Richmond store)

PC Game, CD Roms, Computer Books,

CD Movies, Rental & Sales

• phone for our everyday low price

on new PC games.

We carry both Chinese &

English titles.

• over 700 almost new consignments and used PC games at very low prices to choose from.

Plus a wide selection of hint books

Chinese and English game magazines.

#### Multimedia

12X CD ROM DR	\$90
24X CD ROM DR	\$100
32X CD ROM DR	\$130
16 BIT 3D SOUND CARD	\$35
SOUND BLASTER 16	\$65
AWE 64 W/512K	\$100
80W SPKS W/AC ADAPTOR	\$25
GNT 5000 SUBWOOFER	\$90
SONLAB SUBWOOFER	\$135

#### Monitor

14" SVGA .27mm	\$175
15" SVGA .28mm	\$295
17" SVGA .28mm	\$395

call now



14" Q41 .28mm	\$230
15" Q51 .28mm	\$290
15" Q53 .28mm	\$350
15" V655 .28mm	\$375
17" Q71 .28mm	\$620
17" V773 .26mm	\$630
17" V775 .26mm	\$760
19" V95 .26mm	\$1190
21" V115 .26mm	\$1375

# digital workforce

## Home office furnishing ...

continued from page 16

(\$268) provides an open top shelf with a lower shelf covered by a black roll-top front cover.

For additional storage, IKEA suggests the Helmer six-drawer unit (\$99). Available in either black lacquer or galvanized steel, the

drawers are excellent for storing office clutter. The unit can be fitted with handy castors, but some drawers tend to stick.

The Effecktiv and Helmer units are the only diet soda budget options in the IKEA office furnishings department. The units are a good start, but provide limited storage as they lack a bookcase or any other large unit. (Unfortunately, the Effecktiv line does not

offer a coordinating full-size bookcase).

The armless IKEA Maximal swivel chair (\$249) provides a gas lift mechanism for seat height adjustment from 40-52 cm, as well as seat tilt and depth adjustability. The upholstery is 100 percent wool and is available in a variety of colors.

"One very good feature this chair offers is seat pan depth," says Duffy. "The lack of

arms is not necessarily a bad thing, but if I were choosing a chair, I would choose one with arms because they are good to support the upper body weight when you are taking a break from your work."

The jewel of the IKEA office is the sturdy Antifoni desk lamp (\$79.95). Made of silver-

continued on page 28



## INTERNET ACCESS

Digital 56k Dial up

**\$18.88/m Flat rate**

**Business 128k ISDN  
Dedicated flat rate \$395/m**

*INCLUDES BC Tel line charge*

web page hosting \$25/m  
email hosting \$25/m

## Areas of Expertise

Cisco, 3Com/USR access hubs, multi-site networking,  
Built to Order Computer Systems, Notebooks,  
ACCPAC accounting, Microsoft products,  
Internet total solution, Cabling, UPS,  
Webpages, Internet Server parking,  
Database Programming.

**www.aebc.com**  
**info@aebc.com**



**TOSHIBA**

**SONY**

**CREATIVE**



Welcome to our on-line store, now open 24 hours every day. [www.computer-player.com](http://www.computer-player.com). Do not wait, please call us or place your orders on-line now.

# COMPUTER CLEARANCE WAREHOUSE

## *The Used Computer* **Liquidators**

We Buy & Sell

Huge Warehouse

14" SVGA COLOR MONITORS	\$111.00
15" SVGA COLOR MONITORS	\$216.00
14" VGA COLOR MONITORS	\$79.00
AT STYLE KEYBOARDS	\$8.00
MICE - \$8.00	SHAREWARE .88
9 PIN DOT MATRIX PRINTERS	\$29.00
24 PIN DOT MATRIX	\$49.00

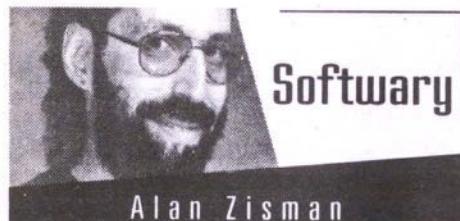
### **486 DX2/66 COMPUTER WITH:**

14" SVGA MONITOR, 8MBS RAM KEYBOARD & MOUSE	\$349.00
WYSE 60 TERMINALS	\$149.00

### **THOUSANDS MORE INCREDIBLE DEALS**

3083 GRANDVIEW HWY - 437-5551 VAN., B.C.  
MON. - SAT. 10-7 / SUN 12-6  
WE LOVE MAIL ORDER - VISA & M/C

# The future according to Microsoft



Softwary

Alan Zisman

**D**r. Daniel T. Ling is being paid to create the future. As director of Microsoft's \$2-billion research effort, he heads a team of 250 (expected to grow to 600 over the next three years), charged with exploring emerging trends in computer software, and with developing "new technologies for improving the way computers interact with people." He presented his vision as one of four keynote speakers at Vancouver's PacRim Comdex this past January.

Currently, Ling suggests, we use our computers as tools—in the future, they will become our assistants. This will be a dramatic change, more dramatic perhaps, than the change from a command-line DOS-style interface to the common graphical Mac/Windows

interface—a change that will make the user interface a human interface.

To make this possible will involve change in a variety of areas, all being actively pursued by Microsoft Research.

Instead of clicking and typing, Ling foresees the ability to hold a conversation with your computer. This will let you experience hands-free computing, an experience that voice-dictation software is starting to demonstrate. But the future, Ling suggests, will see computers that not only recognize individual words, but also understand the meaning of speech. To get there, Microsoft Research is having computers "read" entire dictionaries, creating a "semantic links database" attempting to map the connections between words. Add in a dollop of probability theory, and you get a computer that begins to be able to know that in the sentence "I saw the Grand Canyon flying to Arizona," it wasn't the Grand Canyon that was doing the flying.

This research has already begun to pay off. As far back as Office 95's Answer Wizard, Microsoft Research was working with these

concepts, exploring what words actual users would use to ask questions about what concepts, in order to (on a good day) enable the help engine respond appropriately to natural language questions.

More recently, their research has been implemented in Office 97's grammar checker. Ling expects it will soon appear in Web search engines that, by adding some understanding of the meaning of words in a query, should be able to cut down on the thousands of false responses that show up in too many of today's searches.

Ling expects this to bring us "software software," making PCs seem more intelligent.

That requires that they be able to cope better with uncertainties, by being able to evaluate which response is the most probable, and to "learn" from our interaction with them.

Microsoft also wants your computer to see you. In the near future, they suggest that many computers will be equipped with cameras for videoconferencing. That gives users the hardware needed to allow your computer to respond to your motions and facial expressions... "all" that's needed is the software. Current experiments include screensavers that turn themselves off when someone approach-

continued on page 28

## GIVE SOMEONE A SECOND CHANCE.

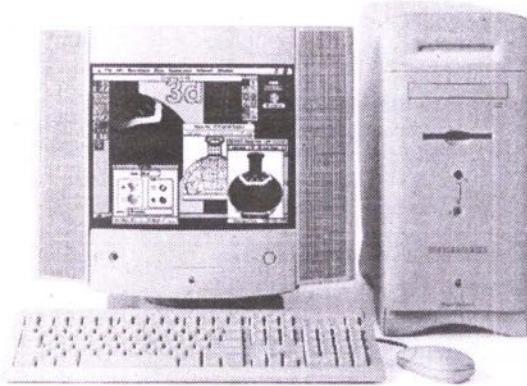
When a Kidney Foundation volunteer knocks on your door, please give generously.

THE KIDNEY FOUNDATION OF CANADA

## MAC STATION

Canada's biggest and best online catalogue of Macintosh products!

<http://www.macstation.com>



With a Mac Station credit card, you can purchase the latest Mac OS systems from Apple, Umax, and Motorola (plus choose from the best selection of Macintosh software in Greater Vancouver) and make no payments with no interest for 3 months. (On approved credit—call for complete details).



Mac Station Burnaby  
#207A - 3430 Brighton Avenue  
420-5224

Mac Station Maple Ridge  
22353 Lougheed Highway  
466-0190 or 800-563-6227



Authorized Dealer

# SIMPLIFY

## WEBSITE HOSTING



### High-Performance Virtual Domain Web Hosting

Dynamic Web Internet Services, Canada's premier Web Hosting company, invites you to enjoy Web Hosting Savings and Simplicity.

Don't settle for anything but the best! Your website will be hosted on a lightning-fast 155 Mbit OC3 Internet connection, delivering the equivalent bandwidth of 100 T1 lines!

All packages come with a **30 DAY MONEY BACK** Satisfaction Guarantee. What are you waiting for? Make your move today and **MASTER YOUR DOMAIN**.

**Starting from \$34.95 a month**

**DYNAMIC WEB**  
INTERNET SERVICES

**www.dynamicweb.ca**

All trademarks are property of the respective owners. US\$100 domain name registration fee is required by InterNIC. No registration fees for .CA domain names.

Call Vancouver: 604.878.1987  
Toll-Free (Canada/US): 1.888.393.3003  
Send E-Mail: [info@dynamicweb.ca](mailto:info@dynamicweb.ca)  
Visit Our website: [www.dynamicweb.ca](http://www.dynamicweb.ca)

99.5% Availability  
Guarantee

# Guaranteed Internet Access. (Cisco Router Included)

Get *Guaranteed Dedicated Access* from Netcom **Business Services**. We'll *waive the set up fee* (up to \$1000), throw in the *hardware* and *guarantee* our *service*.

Dedicated access means you're online all the time. Instant access. No waiting for E-mail. No dial-up. No line-up.

And now you can save up to \$1,000 on set up fees\* with dedicated access from Netcom, one of North America's largest independent ISP.

**Access Options** We offer dedicated access at 64Kbps, 128Kbps and up to T1 access (1,544Kbps).

**All the Hardware** Netcom also supplies you the necessary hardware, including industry leading Cisco Routers.

**Complete Solutions** With one of our NETConnect bundles you also get a Domain Name, multiple E-mail accounts and access to the

NetcomBusinessCentre, a powerful online tool to manage your account. Netcom gives you the fastest, most reliable, highest quality network in Canada, with 7x24 hour network monitoring.

**Internet Guaranteed** Only Netcom gives you the Internet risk free. If you aren't completely satisfied after 30 days, cancel without penalty. Netcom guarantees a minimum of 99.5%\*\* availability for all business services.

**Call Now!** You get more out of the Net with Netcom. Because now we guarantee the Net for you. And you'll save hundreds of dollars on your set up fee.

## NETConnect 64

- 64K dedicated port ISDN access
- Cisco 760 series router
- Domain Name Service
- 10 E-mail boxes at your domain
- Management tools via NETCOM Business Centre

Free  
Set Up  
value

\$350<sup>00</sup>  
/mo.

\$325<sup>00</sup>  
/mo.

## NETConnect 128

- 128K dedicated port ISDN access
- Cisco 760 series router
- Domain Name Service
- 20 E-mail boxes at your domain
- Management tools via NETCOM Business Centre

Free  
Set Up  
value

\$450<sup>00</sup>  
/mo.

\$525<sup>00</sup>  
/mo.

\*Offer ends April 10, 1998. Please quote this registration code to receive your rebate: 4215

\*\*Call or visit our web site for complete details on RiskFree trial and Performance Guarantee.

# 1.800.805.9876

**Netcom**  
Canada

[www.netcom.ca](http://www.netcom.ca)

We Make The Net Work For You.



# ELITECH

安泰  
電腦  
SYSTEM LTD.

コンピューター

Coquitlam: Mon.-Fri. 11:00-18:30 Sat. 11:00-17:00

Abbotsford: Tue. Wed. Sat. 11:00-17:30 Thu. Fri. 11:00-20:00 Sun. 11:00-5:00

Microsoft

Authorized Dealer



Authorized Dealer



MEMBER OF

PRACTICAL SYSTEMS

Cyrix 166MMX CPU  
16MB EDO RAM  
PCI/ISA Mother Board  
Built-in EIDE Ctrl, 512k Pipeline Cache  
PCI 64bit Video Card  
2.1GB Hard Drive  
1.44MB Floppy Drive  
15" Mid-tower Case, 230W PS  
104 Win'95 Keyboard, Mouse  
15" SVGA Monitor  
One month free internet

**\$745**

NOTEBOOK

Toshiba 440CDX CD-----\$1725  
12.1" DSTN/16M/1.4G/10xCD  
POC P-166MMX CD-----\$2995  
12.1" TFT/32M/2.1G/10xCD/16bitSnd  
33.6k Modem/Carry Bag  
POC P-200MMX CD-----\$3995  
13.3" TFT/32M/2.1G/10xCD/16bitSnd  
33.6k Modem/Carry Bag  
Upgrade Options:  
166M->200M->233M-----\$120/\$140  
2.1GB->3.0GB---\$215 33.6k->56k---\$60

MTI 6300 P150/P166MX -----\$2650/\$2750  
12.1" DSTN/16MB/1.4GB/16xCD  
/Sound/Win95  
MTI 6400 P166MX/P200MX ---\$3150/\$3300  
12.1" TFT/16MB/1.4GB/20xCD  
/Sound/Win95

Motherboard

Pentium M/B 512k MMX-----\$109  
Pentium II M/B -----\$179  
Gigabyte T2 512k MMX-----\$140  
Asus TX97/TXP4 512k MMX -----\$185/\$152  
Asus P-II P2L97/P2L97-S ATX -----\$225/\$349  
ABIT SM5A/SM5 VX -----\$129/\$149  
ABIT IT5H HX/PX5 TX -----\$175/\$179  
VIA Apollo VP3 AGP 512k MMX-----\$209

CPU

Pentium 166/200 MMX-----\$156/\$200  
Pentium 233 MMX -----\$285  
Pentium II 233/266/300 -----\$440/\$612/\$850  
Cyrix 6x86 166/200MMX-----\$115/\$128  
AMD K6-166/200/233 MMX---\$169/\$238/\$283

Hard Drive

2.1G/2.5G-----\$189/\$205  
Fujitsu 2.1G/3.2G U-IDE-----\$199/\$255  
Fujitsu 4.3G/5.25G U-IDE-----\$287/\$346  
Fujitsu 6.4G U-IDE-----\$399  
WD 2.1G/2.5G U-IDE -----\$223/\$233  
WD 3.2G/4.3G/6.4G U-IDE -----\$266/\$312/\$415  
Quantum 2.1G/3.2G U-EIDE-----\$220/\$260  
Quantum 4.3G/6.4G U-EIDE-----\$294/\$405  
Quantum 8.4G U-EIDE-----\$543

Memory

30p 1MB/4MB-----\$9/\$16  
72p 4MB/8MB EDO -----\$16/\$20  
72p 16MB/32MB EDO -----\$40/\$88  
168p SDRAM 16M/32M/64M-----\$44/\$90/\$230

PENTIUM II MULTIMEDIASYSTEMS

**P-II!**

Intel Pentium II 233 CPU, 512k Cache  
32MB SDRAM  
Pentium II Mother Board  
S3 3D Virge Video Card  
3.2GB Ultra-IDE Hard Drive  
1.44MB Floppy Drive  
104 Win'95 Keyboard, Mouse  
17" ATX Case  
15" SVGA Monitor  
24x CD ROM, 33.6 fax/modem  
16Bit Sound Card, 60W Speakers  
One month free internet

**\$1535**

PII-266 \$1707  
PII-300 \$1945

or lease \$52/mon



MULTIMEDIA SYSTEMS

Intel Pentium P-200MMX CPU  
32MB EDO RAM  
PCI/ISA Mother Board, 512k Pipeline  
Burst Cache, Built-in EIDE Ctrl  
PCI 64bit Video Card  
3.2GB Ultra IDE Hard Drive  
1.44MB Floppy Drive  
15" Mid-tower Case, 230W PS  
104 Win'95 Keyboard, Mouse  
15" SVGA Monitor  
24x CD ROM, 33.6 fax/modem  
16Bit Sound Card  
60W Speakers  
One month free internet

**\$1180**

P-166 MMX \$1137  
P-233 MMX \$1266  
K6-166 MMX \$1150  
K6-200 MMX \$1219  
K6-233 MMX \$1264

or lease \$40/mon

WE PROVIDE COMMERCIAL AND INDUSTRIAL  
SOFTWARE DEVELOPMENT, NETWORKING  
DESIGN AND ONSITE SERVICE.

Best Seller

Recordable CD-----\$2.5  
Rewriteable CD-----\$23  
Color Scanner Flatbed-----\$180  
15"/17" Monitor-----\$245/480  
Face 2 Face Video Conf. Kit-\$179  
Video Capture w/TV Tuner-\$99  
FM Radio Receiver----\$29.90  
Video Camera/parallel port-\$139

Modem

Zotrix 33.6/56k Fax Data int Voice-----\$56/\$99  
Acer 33.6/56k Fax Data int Voice-----\$64/\$99  
Motorola 56k int. Fax Modem-----\$129  
GVC/Zotrix 33.6k Ext Fax/Modem-----\$125/\$119  
USR 33.6/56k Fax Data int Voice-----\$120/\$175

Sound Card/Multimedia

Yamaha Stereo Sound Card ----- \$25  
Sound Blaster 16 PnP ----- \$52

Sound Blaster 64 AWE Value/Gold-----\$98/\$249

Speaker 7W/60W-----\$12/\$17

Speaker 200W Subwoofer-----\$99

Video Capture w/TV Tuner-----\$99

FM Radio Receiver-----\$29.90

Face 2 Face Video Conf. Kit-----\$179

Video Camera parallel port-----\$139

JAZ/Zip/TAPE

JAZ 1G SCSI int/ext-----\$369/\$499  
ZIP Panasonic/Iomega 100M int/ext -----\$139/\$199  
Ditto 2G/3.2G int-----\$169/\$246  
Ditto 2G/3.2G Parallel-----\$235/\$295  
ZIP disk / JAZ disk -----\$16/\$114  
120MB Floppy Drive/ Disk-----\$159/\$18

TX-UltraIDE SYSTEMS

Intel Pentium P-200 MMX CPU  
32MB SDRAM  
Asus TXP4 Mother Board  
512k Pipeline Burst Cache Built-in EIDE Ctrl  
S3 3D Virge Video Card  
3.2G ST Ultra IDE Hard Drive  
1.44M Floppy Drive  
15" Mid-tower Case, 230W PS  
104 Win'95 Keyboard, Mouse  
15" SVGA Monitor  
24x CD ROM, 33.6 fax/modem  
16Bit Sound Card  
60W Speakers  
One month free internet

**\$1281**

or lease \$46/mon

P-166/233 MMX \$1237/\$1366  
K6-166/200/233 MMX \$1250/\$1319/\$1364

**Canon**

Authorized Dealer

Ethernet Adapter

16bit ISA 10Base 2/T Comb-----\$25  
32bit PCI 10Base 2/T Comb-----\$30  
3COM 3C905TX 10/100-----\$90  
5/8/18Port HUB -----\$75/\$97/\$185  
PCMCIA Ethernet Adapter/Comb-----\$155

Keyboard Mouse

Win'95 104 Keyboard ----- \$17  
Fujitsu 8725/4725 ----- \$29/59  
Logitech Mouse 2B/3B ----- \$14/22  
Generic 2-3 B Mouse ----- \$9

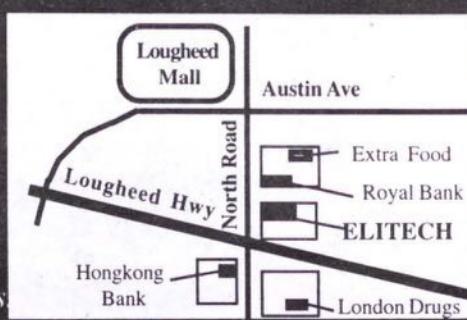
Case

13" /15" w/230W PS ----- \$34/\$38  
19" /24" w/230W PS ----- \$52/\$90  
ATX 17" /24" w/235W PS ----- \$89/\$115  
Desktop Case ----- \$59

Others

Joypad / Joystick ----- \$18/\$25  
Microphone-----\$12  
Earphone w/Microphone ----- \$20  
Adaptek SCSI 2940U/2940UW-----\$249/\$319

國語 粵語 日本語 どうぞ



Limited quantity. Prices are cash discounted and subject to change without notice. Call for the current prices.

# internet for business

## commercial accounts

\$30/month • 75 hours/month with commercial web page & email account

## website hosting

\$30/month\* + \$59 setup • 20MB disk space, POP email accounts (5), no traffic charges, domain name registration and transfer, customized statistics report, auto responder, email forwarding and aliasing, Frontpage 98, MySQL, E-commerce support, secure transactions

## dedicated isdn

\$399/month • includes router at customer end\*\*

## server park

\$299/month • 10 Base-T connection, 5 GB bandwidth (\$35/GB thereafter), Class C IP address

## T1 connection

from \$1199/month • call for details



**SmartNet**

114-3855 Henning Dr.  
Burnaby, BC V5C 6N3  
604-473-9700 phone  
604-473-9080 fax  
888-407-6937 toll free  
<http://www.smartt.com>

Powered by

**BCTEL**

Advanced Communications

**BCTEL**

Authorized ISDN Partner

\* Discount for reseller and webmasters.

\*\* Limited time offer.

# NANTRON SYSTEMS LTD.

## PENTIUM SYSTEMS SPECIAL

SUPERIOR SYSTEMS DESIGNED FOR HOME AND SMALL BUSINESS	
intel Pentium 75.....	\$1098
intel Pentium 166mmx.....	\$1258
intel Pentium 200mmx.....	\$1298
intel Pentium 233mmx.....	\$1398
AMD k6-166mmx.....	\$1258
AMD k6-200mmx.....	\$1298
AMD k6-233mmx.....	\$1458
CX/IBM M2-166+mmx.....	\$1198
CX/IBM M2-200+mmx.....	\$1218
MMX UDMA 75-233MHz M/B	104K FUJITSU8725 WIN95 K/B
.512KB PB CACHE	.2B LOGITECH MOUSE W/PAD
.32MB SDRAM 3V DIMM	.15" MID TOWER CASE W/COVER
.3.2GB FUJITSU HDD	.33.6 INT. FAX VOICE MODEM
.1.44MB FUJITSU FDD	.24X INT. EIDE CDROM DRIVE
.PCI ATI 64BIT 2MB MPEG VIDEO	.16BIT 3D PNP W/T SOUND CARD
.ON BD EIDE/EIO PORTS	.60W SPEAKERS AC POWERED
.15" .28 NI LR GR FLAT DIGITAL	.DESKTOP MICROPHONE
SVGA 1280X1024 MONITOR	.FREE INTERNET SETUP/ACCESS

**SAVE EVEN MORE...**  
SMART MOVE FOR 3/486 USERS  
**CX-133/CX-180 SYSTEM**  
CX-133/180 ALL IN ONE M/B  
16MB EDO SIMM RAM  
2.1GB UIDE HDD  
1.44MB FUJITSU FDD  
4X EIDE INT CDROM  
ON BD 2MB VIDEO  
ON BD 16BIT SOUND  
33.6 INT VOICE/FAX MODEM  
15" MID TOWER CASE  
FREE INTERNET  
SETUP/ACCESS  
**ONLY \$699/779**

## UPGRADE SPECIALS

A. PC UPGRADE \$288	B. MULTIMEDIA PACK \$149	C. INTERNET PACK \$78
CX-133(166+)CPU	24X PANASONIC CDROM	33.6 INT VOICE FAX MODEM
16MB EDO SIMM	3D PNP 16BIT SOUND	(55.6K MODEM ADD \$30)
2MB VIDEO	60W STEREO SPEAKERS	FREE INTERNET SETUP
16BIT SOUND	MICROPHONE	FREE ONE MONTH ACCESS

## INSTALLATION/SETUP FREE

OPEN MON - SAT, 10:30am - 6:30pm

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

AFFORDABLE AND HIGH QUALITY COMPUTERS.

**WE OFFER YOU TOTAL SOLUTIONS!**

## PROFESSIONAL LEVEL

DESIGNED FOR POWER USER  
WE BRING YOU THE MOST WITH  
THE BEST SERVICE AND  
AFFORDABLE PRICE

Pentium II-233.....	<b>\$2298</b>
Pentium II-266.....	<b>\$2468</b>
Pentium II-300.....	<b>\$2698</b>
Pentium II-333.....	<b>\$2968</b>

ASUS P2L97 ATX AGP UDMA LX
ON BOARD 512KB PBC
32MB SDRAM DIMM 10NS 3V
4.3GB UIDE HDD
1.44MB FUJITSU FDD
ON BOARD EIDE/FDD/EIO
2S(16550) 1P(EPP/ECP) 1M(PS/2)
ATI XPERT@PLAY TV OUT 4MB PCI
17" .28 NI LR GR FLAT MONITOR
(1280X1024, DIGITAL OSD)
FUJITSU 104 ENH. WIN95 K/B
3B LOGITECH PS/2 MOUSE & PAD
19" MID ATX CSA TOWER CASE
32X EIDE TOSHIBA CDROM DRIVE
SOUND BLASTER AWE 64 CARD
120W STEREO SPEAKERS
ACER INT 56K VOICE FAX MODEM
MICROPHONE INCLUDE
FREE INTERNET SETUP/ACCESS

## COOL COMPONENTS CORNER

MEMORY	
8/16/32/64MB SIMM RAM	\$29/45/89/259
256KB PIPELINE BURST CACHE	\$18
512KB DRAM/EDO RAM	\$15
DRIVES AND CONTROLLER	
1.2/1.44MB FLOPPY DRIVE	\$65/27
2.1/3.2/4.0/5.0/6.4/7.0GB HDD	\$190/258/298/369/399/460
4X/24X/32X EIDE INT CDROM DRIVE	\$68/105/118
4X/24X PRINTER PORT EXT. CDROM DRIVE	\$148/199
HP-6XR/2XW/2XR4vV EIDE INT/EXT CD WRITER	\$518/620
PANASONIC 8XR/4XW CDROM RECORDER	\$699
100MB ZIP INT/EXT. DRIVE	\$145/195
SY-JET EXT. 1.5GB REMOVABLE HDD	\$498
TAPE DRIVE 2.0GB/3.2GB/8.0GB	\$199/248/488
ADAPTEC 2940U/JW PCI SCSI CARD	\$248/298
VIDEO CARDS AND MONITORS	
ATI 2MB 3D PRO TURBO	\$68/28
MATROX 4MB MYSTIQUE/MILLENIUM	\$168/268
PCI 64BIT 2MB/4MB EDO MPEG	\$48/68
MONITOR 28 NI LR GR 14"15"17"	\$208/285/548
ATI/MATROX TV TURNER	\$158
PCI VIDEO PHONE KIT (INCLUDE CAMERA)	\$188
PCI TV TURNER/VIDEO CAPTURE CARD	\$98
SOUND CARD, MICROPHONE, AND SPEAKERS	
MICROPHONE/EARPHONE	\$12/8
SOUND BLASTER 16/32/64/GOLD	\$68/118/128/239
16BIT 3D PNP DIGITAL WAVE TABLE	\$38
60W/120W/200W/320W SPEAKERS (AC)	\$18/48/58
MODEMS AND NIC'S	
55.6 MOTOROLA INT/EXT. FAX VOICE SPKPHN	\$128/145
33.6 INT FAX/VOICE MODEM	\$78
PCI 32BIT ETHERNET COMBO CARD	\$48
KEYBOARD, MOUSE AND CASE	
FUJITSU 4725/8725 KB	\$68/28
MICROSOFT WIN95 ERGO	\$88
WIN95 ERGO WITH TOUCH PAD	\$88
MICROSOFT MOUSE/LOGITECH 3B ERGO	\$35
LOGITECH 2B/3B	\$18/38
CASE 15"19"/FULL(AT/ATX)	\$58/78/118
SOFTWARE AND DISKS	
7 CDROM TITLES (GROLIER 97, ETC)	\$38
74MIN/650MB BLANK CD	\$3.5
JAZ/ZIP DISK	\$128/158
PRINTERS AND SCANNERS	
CANON BJC-4300/250	\$270/199
EPSON STYLERS 400/600/800	\$270/358/489
MICROTEK SM E3 FLAT COLOR SCSI SCANNER	\$209
CD COPY/BACKUP SERVICE	CALL

## MONTHLY PROMOTION:

100MB ZIP / 1GB JAZ / 1.5GB SYJET \$145/\$378/\$498  
100MB ZIP / 1GB JAZ / 650MB CD \$15/\$119/\$1.99  
56K INT/EXT USR SPST FAX MODEM \$178/\$248



1745 NANAIMO ST. (Near 1st Ave)  
VANCOUVER, B.C. V5N 5C1  
TEL:(604)253-1588 FAX:(604)253-8681  
[WWW.NANTRON.COM](http://WWW.NANTRON.COM)

# Doing business in a global market

The world  
is my  
cubicle

Alan Thwaits

National economies are dead! Long live globalization! Two of Canada's Big Six banks are planning to merge, saying this is the only way they can be competitive in a global market. Much of the software you use for your business is written in southern India, although the software companies themselves are based in North America. Offshore databanks track who you are, what you spend, and where you travel, and then sell the information to market research companies in Canada. Many of the cartoons your kids watch on Saturday morning are crafted in the Philippines for studios in the United States. Welcome to the future—it's already here!

And the future—make no mistake about it—is globally based. There's no room anymore for those who believe that their businesses cover only local needs, and respond only to local markets. Whether you're a desktop publisher, a financial consultant, or a freelance journalist, it's critical to your success that you understand that it's a global marketplace you're dealing with.

At first glance, that news might seem like the kiss of death to the self employed. The world "out there" has, in the past, always belonged to the competition, the folks with lots of staff, a diversified product line, and multi-million dollar budgets—the very antithesis of who you are. That was then, however, and this is now. A very different time and place, and a very exciting one for the SOHOer (small officer, home office operator).

## Grooving to the alternative

To understand why this is good news, let's go back a few years. The small business, owner-operated phenomenon had its beginnings in local markets and local networks. You were who you were because small was how you worked. Early SOHO businesses were, in a sense, an outgrowth of the counterculture of the 1960s—they were very much a conscious alternative to big business.

As SOHOing grew, however, the world was changing, too. In its early years—let's say the early 1980s—the self-employed, owner-operated movement was very much the exception to the rule. The rule wasn't much different than it had been in the 1950s—the company that hired you gave you annual raises and a pension, and offered an unwritten guarantee of continuing employment.

The changes of the late 1980s and the early 1990s changed the way the world worked, however. Now, there is no job security. Venerated institutions change their core busi-

nesses overnight, jettisoning both employees and customers in the process. There seem to be fewer companies doing business, because those that do have larger annual budgets than some nations. And the stirring of a butterfly's wing—a currency devaluation in a country whose name you couldn't pronounce last week—can cause a storm halfway around the world, dropping the Canadian dollar to an all-time low.

Where's the good news in all that, you might ask.

## The good news

To begin with, the technologically savvy SOHOer has access to the same world markets as the competition—the Internet, particularly, means geography is transparent and time zones almost meaningless. The tools that will span time and distance are cheap, easy to use, and affordable. While access to those tools is still somewhat less expensive if you live in or near a large urban centre, there's no reason why markets in Korea, the United States, or Venezuela can't be explored from, for example, your office in a small town in Saskatchewan. Flat-rate long-distance carriers are hungry for your business, and fax and voice technologies are being married to Internet access. Why not be a world presence?

Secondly, as an aggressively marketed SOHO, you have access to the same world markets as the competition. More than ever before, quality counts. Working with tools that give you daily, 24-hour access to your customers (and they to you), you can both excel at what you do, and offer value-added services that the competition perhaps can't. Answer your email promptly. Get yourself an toll-free number. Find someone who will create a standout, interactive Web site where you can strut your stuff. But be warned—it's not enough just to look good. More than ever, customer loyalty is based on service. The world is moving at lightning speed, and an unhappy customer will move on before you have time to do any damage control.

## Be happy

Lastly, let's recognize an intangible plus to SOHOing that will help you maintain in the face of any economic storm. It's called satisfaction. If you're doing what you do best, making a decent living doing it, and carving out a place in the sun for the business that's you, you must be doing something very right. And that sense of rightness usually translates into a positive attitude, which in turn translates into success. Wisdom, a sense of peace, and profit, too! Who says you can't be a contender on the world stage? ♦

Alan Thwaits is a freelance journalist who specializes in mobile computing and online technologies. He can be reached at [nomad@praxcomm.com](mailto:nomad@praxcomm.com).

**KENNEDY STORE NOW OPEN!!**  
**NORTH AMERICAN WIDE SHIPPING**

the **Notebook** broker



"GUARANTEED Lowest Prices in Canada"

## GREAT DEALS !!!

**ACER 391C P133MMX 16/1.6/20x/12.1DS/336 \$1,645.00**

**FREE 16MB RAM FOR ACER 391C (until Feb. 20)**

**DAEWOO 7420 486DX4 100 8 / 810 / 10.4 TFT \$1,295.00**

**This is NEW product with a 1 year warranty**

**3COM PalmPilot Pro Lowest price in Canada !!! \$445.00**

## TOSHIBA

50CT	P75	16/772/6.1TFT/1.8 lbs.	\$1,595.00
70CT	P120MMX	16/1.6/6.1TFT/1.8 lbs.	\$2,625.00
300CT/1.6	P133MMX	32/1.5/10.4TFT/336/3.7lbs.	\$2,650.00
300CDS	P166MMX	16/2.0/10x/12.1DSTN	\$2,195.00
310CDS	P200MMX	32/2.0/10x/12.1DSTN	\$2,795.00
440CDX	P133MMX	16/1.35/10x/12.1DS	\$1,695.00
440CDT	P133MMX	16/1.35/10x/12.1TFT/336	\$2,295.00
460CDX	P166MMX	32/2.0/10x/12.1DS	\$2,295.00
460CDT	P166MMX	32/2.0/10x/12.1TFT/336	\$3,495.00
480CDT	P233MMX	32/3.82/10x/12.1TFT/336	\$4,650.00
530CDT	P166MMX	32/2.0/10x/12.1XGA/336	\$4,195.00
750DVD	P233MMX	64/4.77/2xDVD/13.3TFT	\$7,045.00

## IBM Thinkpads

380D	P150MMX	16/2.1/8x/12.1 TFT	\$2,795.00
380ED	P166MMX	16/2.1/20x/12.1FRSTN	\$2,545.00
560X	P233MMX	32/4.0/12.1TFT	\$4,695.00
IBM770	P233MMX	32/5.0/14.1TFT	\$7,195.00

## FUJITSU Lifebook

735DX	P133MMX	16/1.6/20x/12.1DS/56K	\$2,050.00
585TX	P233MMX	32/4.0/20x/12.1XGA/336	\$4,550.00

## HITACHI VisionBooks

PLUS	P133MMX	16/1.4/20x/12.1DS/336	\$1,995.00
PRO	P233MMX	32/3.2/20x/13.3XGA/56K	\$5,195.00

## Acer

391C	P133MMX	16/1.6/20x/12.1DS/336	\$1,645.00
391T	P150MMX	16/2.1/20x/12.1TFT/336	\$2,695.00
392C	P150MMX	16/2.1/20x/12.1DS / 336	\$1,995.00
392T	P166MMX	32/3.2/20x/12.1TFT/336	\$3,150.00
393C	P166MMX	16/2.1/20x/12.1DS/336	\$2,195.00
393T	P166MMX	32/2.1/20x/12.1TFT/336	\$2,795.00
395T	P233MMX	32/3.2/20x/12.1TFT/336	\$3,795.00
TM 7120T	P200MMX	32/3.2/20x/12.1TFT/336	\$4,295.00
TM 7130TE	P233MMX	32/3.2/20x/13.3 XGA/336	\$4,995.00
TM 7164TE	P266MMX	32/4.1/20x/13.3 XGA/336	\$5,595.00



## MANY OTHER MAKES & MODELS AVAILABLE

Prices subject to change without notice. Not responsible for misprints or typographical errors.

## LARGEST NOTEBOOK DISPLAY IN CANADA!!

### TORONTO

104 Dundas Street East  
Toronto, Ontario  
Tel: (416) 599-0594  
Fax (416) 599-9146

### CORPORATE SALES

1 800-304-7257  
CANADA AND USA

### SCARBOROUGH

"Notebook Superstore"  
1370 Kennedy Rd.  
Toronto, Ontario  
Tel: (416) 285-7787  
Fax: (416) 285-9839

HAMILTON Store opening Apr. '98

email: [sales@notebookbroker.com](mailto:sales@notebookbroker.com) [www.notebookbroker.com](http://www.notebookbroker.com)  
PO's (Corporate, Government, Education) FINANCING (O.A.C.) all prices are CASH DISCOUNTED (others add 2%)

IPC IBM Panasonic SHARP HITACHI TOSHIBA  
AST DAEWOO EVEREX Xircom Acer FUJITSU

**CANADA'S #1 SOURCE FOR NOTEBOOKS**

## Power User

Sandra Mingail

## Online jewels for SOHO workers

Eight a.m., Monday, congestion grows on the highways, as commuters begin their week. A steady stream of workers flow into concrete towers and begin their ascent to

corporate offices. For more and more Canadians, however, the work week begins by stepping foot into a home office just metres from their bedroom. More than two million

Canadians operate a home-based or small business, with a projected growth rate of 25 percent per year until 2000.

Most SOHO (small office, home office) workers will agree working at home can be an isolating experience. There are no colleagues to commiserate with over coffee, no leisurely corporate lunches, no boss to remind you of deadlines. SOHOers must possess a hefty dose of discipline and self-motivation.

But thanks to computer technology, a reliable service provider, and a speedy modem, the home-office worker can now access treasure troves of information. In fact, with the proper business, communication, and organizational skills, a one-person home operation can now conduct an international business from their desktop.

Somewhat perturbing, though, is that one can run a home-based business, interact with customers and clients, and provide product or services with very little face-to-face contact with humans. Why bother standing in line at the bank, when you can conduct online banking in your pajamas, at midnight? Need the latest business news? No need to partake in chitchat with the newsstand attendant—just wait for the latest headlines from your favourite push technology to dance across your screen. Can't hop a plane to next week's annual conference and exhibit? Not to worry. The keynote addresses and exhibitor contact information will be posted online. Of course, if you really yearn for human companionship, you can always schedule a video conference and implement a virtual think-tank session.

## Canadian SOHO online resources

Curious to discover what resources exist for SOHO workers, I conducted a quick online search. The Entrepreneurial Edge for Business Resources, a service of the Edward Lowe Foundation, provided a one-stop source for excellent links (<http://www.edgeonline.com/main/resource/page/index2.shtml>). I clicked on the Federal Business Information System link. This is a collection of documents with information on business-related programs, services, and regulations. It's an excellent place to access information from all federal departments that are partners in the Canadian Business Service Centres initiative.

You can browse federal government programs and services aimed at small and medium-size businesses by categories, such as communications, aerospace, and manufacturing. There are links for start-ups, import or export companies, and research and development. Concerned with intellectual property issues? Search the Canadian patents database or read details on copyright. Should you require training, there are listings of employment counselling centres and special initiatives, such as the Experience Canada program—a 10-month career development program for 18 to 29 year olds.

The Canadian SOHO directory (<http://www.ridgeco.com/soho/sohodir.html#public>) is a relatively new site that lists service

## Anitec Computers

## Super Special



## ACT Power Series

**MMX166-\$989** lease \$33/m<sup>2</sup> **MMX200-\$1599** lease \$54/m<sup>2</sup>

ACT Deluxe mid tower case  
Pentium MMX motherboard  
Support USB devices, 233MHz  
512k Pipelined Burst cache  
Intel/Cyrix/AMD processor  
16mb Edo Ram (up to 256mb)  
PCI 64b 2mbSvga card & Mpeg  
2.1Gb UDMA hard drive  
Panasonic 1.44mb floppy drive  
24XCdrom & 16bit stereo sound  
33.6k voice fax/modem  
80w stereo speakers & Mic.  
104 keyboard & mouse & pad  
14" .28dpi Svga color monitor  
Cyrix Mx166-\$949 Mx200-\$989  
**MMX166-\$989 MMX200-\$1048**  
**MMX233-\$1158 K6 166-\$1049**  
**K6 200-\$1129 K6 233-\$1259**

## ASUS

**PENTIUM:**  
TXP4(AT 430TX 512K) \$148  
TXP4-X(AT 430TX 512K) \$159  
TX97(AT 430TX 512K) \$176  
TX97-E(AT 430TX 512K) \$176  
TX97-E(AT 430TX 512K) \$187  
VX97(AT 430VX 512K) \$128  
**PENTIUM II:**  
P2L97(ATX 440LX) \$218  
P2L97-S(ATX 440LX SCSI) \$329  
P2L97-DS(DUAL SCSI) \$469

## MATSONIC

5120TG(AT Acer 512) \$79  
M7710(ATX 440LX) \$159  
**LuckyStar**  
LSTX1(AT 430TX 512K) \$105

## FIC

PA2007(AT 1MB) \$139  
PA2012(ATX 1MB AGP) \$169

## HOUSTON

M565(AT TXPro 1Mb) \$105  
M575(AT TXPro 1M sound) \$105  
M571(AT TXPro 512K Sound Video up to 4Mb) \$108  
M572(AT TX 512K Sound) \$105  
M570(AT TXpro AGP) \$108  
M710(ATX LX AGP) \$169

## ABIT

PX5(AT 430TX 512K) \$119  
TX5(AT 430TX 512K) \$139  
TX5N(AT 430TX 512K) \$129  
AX5(AT 430TX 512K) \$139  
LX6(PII 440LX) \$209

## Boxed CPU—3 years warranty

Intel fan/Manual/Logo with all boxed cpu

2607 Kingsway Vancouver B.C. V5R 5H4

Ph: (604)435 2038 Fax: (604)435 1298  
Business Hours: Mon.-Sat.: 10-6; Sun.: close

**Anitec**  
computer technology

1 Month Internet  
**FREE!**  
with all computer purchased!

## Pentium MMX 166/200/233MHz — \$1259/\$1339/\$1429

ACT Deluxe 15" tower case  
PentiumMMX motherboard&CPU  
512k Pipelined cache  
32Mb 10ns SDRAM168 pin  
2.1Gb UDMA hard drive  
Panasonic 1.44Mb floppy drive  
64bit 4Mb SVGA accelerator

full motion MPEG player  
24X EIDE CDrom drive  
16bit 3D Stereo PnP sound  
80w stereo speakers & Mic.  
33.6K data/voice/fax/modem  
Windows keyboard & mouse  
15" color digital monitor

Windows 95 OSR2  
Lotus Smart suite 97'  
1-2-3 Spreadsheet  
WordPro Wordprocessing  
Approach Database  
Freelance Graphics  
Organizer Scheduler  
Norton AntiVirus

## ACT Premium Series

**PII 233-\$2699** lease \$90/m<sup>2</sup>

ACT ATX 19" 250W tower case  
ASUS P2L97 Pentium II motherboard  
440LX, Support new USB & AGP  
Intel Pentium II processor  
64mb 168pin 10ns SDRAM  
ATI Xpert@Work AGP 4Mb  
Quantum 4.3Gb Ultra DMA  
Panasonic 1.44mb floppy drive  
Toshiba 32x EIDE CDrom  
Sound Blaster AWE64 3D PnP  
USR 56k int. voice fax/modem  
SubWoofer speakers & Mic.  
PS2 Windows 104 keyboard  
PS2 Logitech mouseman  
Viewsonic G771 17" digital monitor  
Pentium II 266MHz-\$2899  
Pentium II 300MHz-\$3148  
Pentium II 333MHz-\$3448

## ACT SuperPro Series

## Acer Open Series

**MMX200-\$1758** lease \$62/m<sup>2</sup>

Acer A-Open mid tower case  
Acer MMX motherboard  
512k Pipelined cache, USB, 233MHz  
Intel Pentium MMX processor  
32mb 168pin 10ns SDRAM  
ATI Ragell 3D 4M Svga & Mpeg  
3.5Gb Ultra IDE Hard Drive  
1.44mb floppy drive  
Acer 32x EIDE CDrom  
Acer 3D stereo sound/FM Radio card  
Acer 56k voice fax/modem  
80w stereo speakers & Mic.  
Acer Ergonomic keyboard  
3 button NetMouse  
Acer 15" SVGA color monitor  
**MMX200-\$1758 MMX233-\$1868**  
**K6-200-\$1818 K6-233-\$1948**  
**P II 233-\$2168 P II 266-\$2358**

## GIGA-BYTE

GA-586T2(AT 430TX 512K) \$129  
GA-586TX3(AT 430TX 512K) \$159  
GA-586ATX3(ATX 430TX 512K) \$159  
GA-686LX(ATX 440LX AGP) \$219  
GA-686SLX(440LX scsi AGP) \$329  
GA-686DLX(Dual PII scsi AGP) \$379

## TYAN

Tomcat4 S1564S AT \$179  
S1564D AT \$249  
Turbo AT/TX S1571 \$149  
ATX/TX S1573 \$159  
Tiger2 ATX/LX S1696S \$245  
ATX/LX S1962D \$369  
Thunder2 ATX/LX S1696D \$599  
Tahoe2 ATX Dual PII \$359  
TahoeA ATX PII audio \$289  
Tacoma P-Pro ATX S1672 \$269

## Motherboard Warehouse

## ACER

**PENTIUM:**  
AP5T-3(AT TX 512K) \$139  
AX5T-3(ATX TX 512K) \$159  
AP5VM (AT VX 512K) \$125  
AP58 (AT SIS 512K) \$115  
PENTIUM II:  
AX6L(ATX 430LX AGP) \$239

## SPACEWALKER

**PENTIUM:**  
SH569(AT 430TX 512K) \$129  
SH603(AT AMD 1M) \$165  
SH579(AT VIA 512K) \$109  
PENTIUM II:  
SH637(ATX 440LX AGP) \$169

## INTEL

**QDI SPEEDEASY**  
TITANIUM IB(AT 430TX 512K) \$139  
TITANIUM IIIB(ATX TX 512K) \$145  
LEGEND I (ATX 440LX LDCM) \$249  
AL440LX(ATX 440LX) \$259

## Pentium MMX(Boxed)

## Pentium II(Boxed)

166/200/233—\$159/\$199/\$299 233/266/300/333—\$419/\$585/\$809/\$1099

—OEM Processors also available(Intel/AMD/Cyrix). Please call for excellent Prices.

boxed  
pentium processor  
with MMX  
technology

## Printer/Scanner Monitor

**VIDEO CARD**  
ATI  
3D Xpr.+ 2/4m \$79/109  
3D Xpr.+pc2tv 2/4m/105/129  
3D ProTurbo pc2tv 4m \$175  
All-In-W.Pro 4/8m \$279/368  
Xpert@play 4/8m \$235/295  
Xpert@work 4/8m \$207/275  
AGP  
Xpert@play 4/8m \$249/315  
Xpert@work 4/8m \$219/285  
All-In-W.Pro 4/8m \$315/399  
**DIAMOND**  
Stealth II 3D 4m \$139/\$153box  
Viper 3D oem/ret. \$219/249  
Monster 3D oem/box \$209/249  
**MATROX**  
Mystique 220 4m \$135  
Millennium II 4m/8m \$199/299  
Asus 3Dexplorer3000 agp\$199  
**No.9 REVOLUTION**  
AGP 4/8m \$339/399

**RAM**  
MS-Windows95 OSR2 \$129  
MS-Office Pro 97 \$399  
MS Home Bundle 98 \$89  
EDO:8/16M -\$23/\$39  
32/64M-\$79/\$289  
SDRAM:16/32MB-\$49/\$79  
64MB-\$239

## FAX/MODEM

**HARD DRIVE**  
ACER 33.6K/56K \$65/99  
Quantum  
USR int. 33.6/56 voi. \$125/169  
Motorola VoiceSurf 56k\$129  
Diamond Supra int.33.6K\$79  
SCSI 2.1/3.2/4.3/6.4/8.4  
NetCommander/SDN \$289  
Cardinal ISDN 128k \$255  
Western Digital  
UDMA 2.1/2.5/3.2/4.3/5.2/6.4G  
\$209/218/239/289/299/399

## CASE

AT(230W power supply)  
15"19"/25" \$38/49/89  
ATX(250W power supply)  
15"19"/25" \$79/89/109

## MULTIMEDIA

**ZIP/TAP**  
24X/32X \$89/105  
16BIT SOUND CARD \$19  
SoundBlast.16/AWE64\$55/99  
SiSonic Vibes PCI \$49  
MAXTOR  
UDMA 2.1/2.6/3.2/4.3/5.2/6.4G  
\$189/219/259/299  
**CD-Writer/DVD**  
Creative DVD Encode kit \$399  
Toshiba DVD Rom only \$165  
Pionner DVD Encode kit \$359  
Sony CDU926S 2x/6x kit \$469  
HPT200/E CDR kit \$529/639  
Yamaha RW 6/2/4/8 \$839/959  
Panasonic CW7501B 4/2 \$419  
Jaz 1G I/E scsi \$385/495  
Panasonic CW7502B 8/4 \$619  
Jaz 2G I/E scsi \$769/889

## ZIP/TAP

**ZIP/TAP**  
Panasonic 1.44 Floppy \$28  
Panasonic LS120 \$138  
Iomega100 zip I/E \$139/199  
Jaz 1G I/E scsi \$385/495  
Panasonic CW7502B 8/4 \$619  
Jaz 2G I/E scsi \$769/889

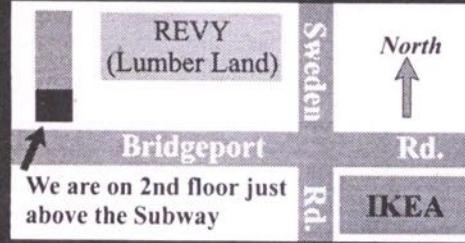
## CASE

AT(230W power supply)  
15"19"/25" \$38/49/89  
ATX(250W power supply)  
15"19"/25" \$79/89/109

## Special

\* Pananonic LS120 drive \$138  
\* Toshiba 32XCDROM \$105  
\* Viewsonic PT775 \$928  
V773/Q51 \$595/289  
\* SONY 100ES \$399  
\* USR 56K voice\$139  
\* WD 5.1G HD \$299  
\* Quantum 6.4G\$359

Prices subject to change without notice. All trademarks are belong to their respective owners. Surcharge on credit cards.



# ADDAX Computer Inc.

Best quality, Best prices, Best service

#21-12391 Bridgeport Rd.  
Richmond, B.C. V6V 1J4  
Tel: (604)244-0793  
Fax: (604)244-9762  
Tech: (604)244-8793  
<http://www.addax.bc.ca/>  
Mon-Sat 10am-6pm



We will try to beat any advertised price! Systems are Internet Ready with 1 month FREE access, 3 year labor & 1 year parts warranty!

## Ultra DMA+1M PB Cache

K6-233 \$1379 \$45/mth\*  
Cyrix 6x86 M2(MMX) :  
PR200/PR223 \$1259/1339  
AMD K6(MMX):  
166/200 \$1319/1349  
Intel Pentium MMX:  
166/200/233 \$1299/1329/1399  
Houston M575 Ultra DMA MB.  
1MB Pipe Line Burst Cache  
32MB SDRAM 168pin  
4.3G Ultra DMA Hard Drive.  
Mitsumi 1.44MB Floppy Drive  
S3 3D Virge DX 4MB MPEG Video  
Panasonic/Creative 24x CD-ROM  
Integrated 16Bit 3D Sound on Board  
Acer Flex 56K Voice Fax Modem  
PackardBell Win95 Keyboard  
Addax 15" Tower Case W/ 230w ps  
Logitech Mouse & Pad  
240W Amplified Speakers  
15" NI/LR/Digital/.28mm Monitor

## SUPER DEAL

K6-233 \$1299 \$43/mth\*  
M2(MMX)200/233 \$1179/1269  
K6(MMX)166/200 \$1229/1259  
Intel Pentium MMX CPU:  
P166/200/233 \$1219/1249/1329  
Pentium TX Pro Ultra DMA MB.  
512k Pipe Line Burst Cache  
32MB SDRAM 168pin  
Panasonic 24X EIDE CD-ROM  
4.3GB Ultra DMA Hard Drive  
Mitsumi 1.44M Floppy Drive  
S3 3D Virge DX 4MB Video Card  
Zoltrix 33.6 Voice Fax Modem  
16Bit 3D Full Duplex Sound Card  
Win95 104Key Keyboard  
Logitech Mouse & Pad  
Addax 19" Tower Case w/230W PS  
60W Amplified Speakers  
15" NI/LR/Digital/.28mm Monitor

## PentiumII Power Systems

AGP+SDRAM+Ultra DMA+MMX  
233MHz \$2059 \$67/mth\*  
266/300MHz \$2189/2379  
333MHz \$2719  
Asus P2L97/ Intel 440LX Pentium II MB.  
Intel PII CPU with 512k L2 Cache & Fan  
32MB SDRAM 168pin  
4.3G Quantum Ultra DMA Hard Drive  
Mitsumi 1.44M Floppy Drive  
CL.5465 AGP 3D 4MB Video Card  
Panasonic 24x EIDE CD-ROM  
SoundBlaster AWE 64 Sound Card  
Parckard Bell 104Key Win95 Keyboard  
Logitech Mouse & Pad  
Addax 19" ATX Tower Case w/230W PS  
Acer Flex 56K Voice Fax/modem  
240W 3D surround Speakers  
17" NI/LR/OSD/.28mm/SVGA Monitor

## PentiumII WorkStations

AGP+SDRAM+UltraDMA+MMX  
233MHz \$1499 \$49/mth\*  
266/300MHz \$1639/1829  
333MHz \$2169  
Intel 440LX Chipset PentiumII MB.  
Intel PII CPU with 512k L2 Cache  
32MB SDRAM 168pin  
2.5GB Ultra DMA Hard Drive  
Mitsumi 1.44M Floppy Drive  
Creative GraphicBlaster 2M Video  
Panasonic 24x CD-ROM Drive  
16Bit 3D Full Duplex Sound Card  
BTC 104Key Win95 PS2 Keyboard  
Masonic 3B Mouse & Pad  
Addax 19" ATX Tower Case  
Zotrix 33.6K Voice Fax/Modem  
60W Amplified Speakers  
15" NI/LR/Digital/.28mm Monitor

## Pentium WorkStations

K6-233 \$989 \$33/mth\*  
M2(MMX)200/233 \$859/949  
K6(MMX)166/200 \$929/959  
Intel Pentium MMX CPU:  
P166/200/233 \$899/949/1019  
Pentium VX-Pro II MotherBoard  
512k Pipe Line cache  
16MB EDO RAM 60ns  
Mitsumi 4X EIDE CD-ROM  
2.5GB EIDE HARD DRIVE  
Mitsumi 1.44M Floppy Drive  
CirrusLogic 5446 1M MPEG Video  
Zoltrix 33.6 Voice Fax Modem  
Integrated 16Bit 3D Sound on Board  
Win95 104Key Keyboard  
Masonic 3B Mouse & Pad  
Addax 15" Tower Case w/230W PS  
60W Amplified Speakers  
14" NI/LR/.28mm SVGA Monitor

## Brother Laser Printer HL720 (600x600 DPI) \$305!

## 15" Monitor NI/LR/Digital(Samsung Tube) \$244!

### VIDEO CARDS

Cirrus Logic 5446 1M MPEG..... \$28/39  
Creative GraphicBlaster 64Bit 1M/2M.... 32/43  
S3 3D Virge DX MPEG 2M/4M..... 48/64  
Apollo 3D Voodoo Rush 6M..... 229  
STB Velocity 128Bit AGP 4M..... 179  
Diamond Stealth 3D 2000XL 2M/4M.... 79/99  
Diamond Stealth II 220 3D 4M..... 138  
Diamond Viper 3D 4M PCI/AGP ... 218/228  
Fire GL1000 Pro 8M PCI/AGP .... 279/289  
Diamond Monster 3D 4M OEM/Box.. 214/265  
Diamond Monster 3D II (Voodoo) 8M .... 319  
ATI 3D Exp.+ (DVD Ready) 2M/4M ... 77/108  
ATI 3D+ PC2TV 2M/4M ..... 104/128  
ATI 3D PC2TV Pro Turbo 4M/8M ... 174/234  
ATI All-In-Wonder 2M/4M..... 224/254  
ATI Expert Work PCI 4M/8M ..... 189/269  
ATI Expert Work AGP 4M/8M ..... 204/289  
ATI Expert Play PCI 4M/8M ..... 204/289  
ATI Expert Play AGP 4M/8M ..... 228/309  
Zoltrix TV Toner & Capture Combo..... 99  
Matrox Millennium II 4/8M ..... 198/298  
Matrox Mystique II 220 4M ..... 138  
AGP 3D 4MB MPEG ..... 89  
ASUS 3D-Explorer 1M AGP ..... 195  
Video Card EDO RAM 1M ..... 12

### MONITORS

Daytek 14"(1436D)/15"(1531D) .... \$209/289  
KTX .28mm 15"/17" ..... 259/479  
Voxon .28mm 14/15/17" ..... 168/254/474  
Sceptre 15" Komodo/P511 ..... 254/289  
Sceptre 17" P73/J73 (Multimedia) ... 549/599  
Sceptre 17" .26 P73A/P75A(1600x) .. 569/619  
Sony 15" 100SX/100SF ..... 449/499  
Sony 15" 100ES (Better than 100SF) ..... 449  
Sony 17" 200SX/200SF ..... 759/798  
Sony 17" 200ES (Better than 200SF) ..... 759  
Samsung 15"GLE(500S)/GLI(500B) .. 399/419  
Samsung 17"GLE(700S)/GLI(700B) .. 735/759  
MAG DX .25mm 15T/700T ..... 469/799  
ViewSonic 17" PT770/PT775 ..... 859/928  
ViewSonic 17" G773/P775 ..... 684/789  
Optiquest V773/V775 ..... 594/694  
Mitsubishi 17" 67XV/87TXM ..... 845/1019  
NEC 15" A500/E500(.25mm)..... 439/479  
NEC 17" A700/E700/M700 ..... 764/889/989  
Acer 17" 76E/76C/78IE ..... 514/564/594  
Panasonic 17" S70/P70/PF70 .... 669/859/1129

### MOTHERBOARDS

Houston MMX 512k w/16Bit 3D Sound ..... 94  
Pentium TX Pro Ultra DMA 512k PB Cache.. 94  
Houston M575 1MB Cache w/3D Sound ..... 109  
Houston 1MB Cache w/3D Sound & AGP ..... 139  
Intel TX Chipset Ultra IDE 512K PBC ..... 119  
Intel 440FX Pentium Pro MB ..... 169  
ASUS SP97 up to 4M Buit in Video/512k ... 134  
ASUS 512K TXP4/TXP4-X ..... 149/169  
ASUS 512K TX97/TX97-E ..... 178  
ASUS 512K TX97-X/TX97-XE ..... 188  
ASUS PII P2L97/P2L97-S ..... 224/349  
ASUS PII P2L97-DS ..... 478  
FIC PA2007 Apollo-2 1M Cache ..... 144  
FIC PA2012 Apollo-3 w/1M /AGP/ATX..... 188  
GA-5MS ATX 512 PBC 8-512MB ..... 134  
Shuttle SH569/SH623 ..... 134/248  
Tyan Tomcat XI Dual P5/512k ..... 259  
Tyan 1692DL(ATX 440LX) ..... 385  
486 PCI/ISA/VLB MB ..... 89

### PRINTERS

Canon BJC 250/4300 ..... \$188/258  
Canon Printer Ink Cartrige Color ..... 19  
HP 692C/722C ..... 318/454

Epson Stylus 400/600/800 ..... 258/338/464

Epson Ink Cartrige Black/Color ..... 22/29

Epson Ink Jet Paper (Photo Quality)..... 15

HP 6L/6P/6MP ..... 525/985/1249

Brother HL730/HL760 ..... 389/459

Brother 1060(10ppm)/1660(17ppm).... 779/1309

Fujitsu PrinterPartner 10V/14 V..... 599/699

Umax Scanner 610p/610s/1200s ..... 194/199/369

Acer 310P Color Scanner 4800 DPI..... 139

### FAX MODEMS

Zoltrix Voice 33.6/56K ..... \$54/95

Supra Voice 33.6/56K ..... 78/129

Creative 33.6 ModemBlaster ..... 69

Motorola 56k Voice with microphone..... 135

USR 33.6 Fax Modem/Voice ..... 105/118

USR 56K Fax Modem/Voice..... 164/164

GVC-X2 56K Voice ..... 129

Motorola 56K Voice External w/micphone... 159

### CD -ROM & CD WRITER

Mitsumi 4x ..... 59

Panasonic/Creative/Toshiba 24X ..... 94

Toshiba 32X ..... 119

SCSI Pioneer/Sony 24x ..... 158

Panasonic SCSI CD-Writer 8x4/Contr. ... 559/639

Sony External 8x2 IDE CD-Writer ..... 469

Pioneer DVD KIT ..... 339

Writable CD w/case Memorex/TDK ..... 2.7/3.5

Video Conference Kit (Color Camera) ..... 149

### HARD DRIVES

2.1G/2.5/3.2 EIDE ..... \$189/205/242  
2.5/3.4/4.3/ Ultra DMA ..... 209/239/279  
5.2/6.4/8.4G Ultra DMA ..... 339/384/539  
WD Ultra DMA 2.5/3.2/4.3G.... 229/249/289  
WD Ultra DMA 5.1/6.4G..... 319/389  
QT. Ultra DMA 1.6/2.1/3.2G ... 199/229/244  
QT. Ultra DMA 4.3/6.4G ..... 285/384  
QT SCSI 2.1/3.2/4.3/6.4G .. 295/345/399/574  
WD 9.1G SCSI U/UW ..... 1279/1299  
Barracuda SCSI UW 4.55/9.1G.... 855/1375  
Adaptec SCSI 2940U/2940UW..... 249/319  
Asus Fast SCSI II/SC875 UW..... 89/159

### SOUND CARD/SPEAKER

ESS 1868 16bit PnP..... \$22  
32bit PCI Ensonic/Monster 3D..... 59/194  
SoundBlaster PnP 16bit/AWE 64 ..... 54/98  
SB Discovery Kit (AWE 64 & 24x) ..... 329  
Speakers 60/240W ..... 18/48  
KTX 500w Subwoofer ..... 119  
GNT 5000 Subwoofer ..... 79  
Yamaha M15/MS25(Subwoofer) ..... 77/114  
Micphone Portable/Gooseneck..... 3/9  
Headphone Set w/Micphone ..... 14

### Keyboard & Mice

Win95 104 Keyboard PackardBell ..... \$17  
Fujitsu KB 8725/4725 ..... 25/59  
MS Mouse 2B/3B(intelli mouse)..... 29/49  
MS Natural Keyboard ..... 78  
Liteon Natural Keyboard TouchPad..... 74  
Mouse 3B/Mitsumi ..... 7  
Genius Internet Mouse..... 16  
Logitech Mouse 2B/3B ..... 14/22  
Logitech MouseMan 3B ..... 29

### Networking

PnP Ethernet Card ISA/PCI ..... 27/32  
KTX 10/100Mb ..... 49  
3COM 3C905-TX 100Mb PCI ..... 88  
5/9/16 Port Ethernet Hub..... 69/ 85/175  
Cable Assembly 15/25/50ft ..... 9/12/19  
Cable per ft Coax/Rj45..... 0.17/1.19  
Terminator/RJ45 Connector ..... 3/1

\*Leasing rate is based on 36 month, 10% buyout and financing is available.

\* Prices reflect a 3.25% cash discount.

\* Prices and products are subject to change without notice.

\*All system are tested and burned-in for 48 hours before shipping.

\*Government and corporate purchase orders are welcome.

### MEMORY

30pin 1M/4M..... \$5/17  
30pin True Parity 1M/4M ..... 9/19  
72pin 4/8/16/32M EDO..... 15/23/43/79  
72Pin 4/8/16/32M..... 17/26/49/89  
SDRAM 32/64/128M ..... 85/238/478  
Pipe Line Cache 256/512K ..... 14/29  
256K Cache for 486/586 MainBoard .... 15

### CPU

Intel P133/150/166/200..... 139/149/159/269  
Pentium MMX 166/200/233.... 154/188/278  
Pentium Pro180/200 ..... 279/669  
Cyrix M2(MMX)166/200/233... 108/128/194  
AMD K5 166..... 139  
AMD K6 166/200/233 ..... 169/209/239  
PII 233/266/300/333 ..... 429/569/759/1109

### ZIP DRIVES

Iomega ZIP 100M Int./ Ext ..... 124/184  
Iomega Jaz 1G SCSI Int/Ext..... 369/494  
ZIP Disk 100MB/Jaz 1G ..... 15.4/114  
LS120 MB Flopy Drive/Disk ..... 125/18  
Dito 2G Tape Drive Int./Ext. .... 179/259  
Dito 3. 2G Tape Dr. Int./Ext. .... 259 /285  
Dito Tape 2G/.3.2G..... 29 /call

### UPGRADE OPTIONS

14" to 15" to 17" Monitor ..... 79/229  
MS-Home 98 CD Bundle..... 88  
MS Encarta'98 Home Bundle ..... 59  
Compon's Encyclopedia 97 ..... 18  
Corel Draw 8 Full\* ..... 179  
Corel WordPerfect 8 suite\*.... 69  
Lotus SmartSuite 97 Full Ver. Retail .... 29  
Grolier 98 & Lot Games (10 CDs) ..... 59  
7 Titles Encyclopedia&Games ..... 49

### CASES & Misc.

13/15/19" Tower Case w/230W.... \$34/38/52  
25" Full Size Tower Case w/230W PS..... 85  
19/24" ATX Tower Case W/PS..... 89/115  
Destop ATX Case ..... 89  
1.44 Floppy Drive Fujitsu/Mitsumi ..... 26  
Secondary Case Colling Fan ..... 12  
Removable Hard Dive Rack w/fan ..... 21  
Removable Hard Dive Rack SCSI w/fan ... 25  
LPT2 Printer Card ..... 19  
Printer Cable/Bi-directional ..... 5/8  
Power Split ..... 5  
Cable EIDE /Floppy ..... 3/1  
SCSI Hard Drive Cable 3/5Head ..... 5/8  
PS2 Mouse & Keyboard Adaptor ..... 5  
Switch Box For 2Printer/4Printer ..... 19/29  
Others ..... Call

# Do you feel the need for speed?

imagine.net  
INTERNET ACCESS

Imaginet is excited to announce our full conversion to 56Kbps and ISDN "dial on demand" technology for the fastest download speeds available on the 'net!

And, as always, we recognize all computer users were not created equal and that's exactly why we have crafted our company's Internet Access approach to accommodate any level of user.

From our easy to install software suite, 24 hour telephone support and in-home installation options to our free "Welcome to the Internet" courses, we have made it easy for our customers, regardless of their computer experience.

With five access packages, from \$9.95/mth to \$29.95/mth, we have built a premium service at value pricing guaranteed to accommodate any need and budget.



Call Imaginet today at 662-8332, and ask about our money-back guaranteed test drive, and leave the rest to us.

dedication...imagine.that

## Column

### Power User

continued from page 24

categories and the SOHO people who deliver them. Current listings include computer consultants, insurance specialists, financial services—even dog breeders. Add your own company contact information at no charge. Also try Canadian SOHO Business Group (<http://www.soh.ca>).

Recent graduates would be wise to peruse the Canadian Youth Business Foundation Web site—a comprehensive resource concerning pilot programs and funding for youth entrepreneurial ventures. Youth business resources are organized by province and are clickable through an image map of Canada.

### Software to work smarter

Publisher Ziff Davis has compiled an excellent site with links to SOHO resources (<http://www5.zdnet.com/athome/content/hoffice/soho.htm>). Handy shareware includes Personal Information Managers to track your appointments and phone calls, electronic sticky notes for your computer screen, a talking calculator (in case you get *really* lonely), an inventory tool to catalogue your small business inventory, and a bulk-mail utility. And you may want to download the goal-maker software—to help you set those long-range business goals.

And since you'll likely be conducting a good portion of your business over the Internet, you'll want to check out the latest software for faxing, phoning, and collaborating over the World Wide Web.

### Funding that big idea

As any seasoned entrepreneur will attest, a written business plan is a key component to securing the financial backing to support a business idea. Bplans.com is a Palo Alto software firm that develops business and marketing-plan software. Its Web site (<http://www.bplans.com/index1.html>) hosts some helpful hints on how to outline a business plan. Better yet, you can browse through sample online business plans or submit your business plan for review.

The online version of the television show, *Money Hunt* (<http://www.moneyhunter.com/default.htm>), is another excellent site to bookmark. Among the site's many resources, you'll find a column that provides advice on how to approach investors and an online service for matching entrepreneurs and investors. If financial jargon has got you puzzled, try the Investorspeak Decoder—an online financial translator that lets you enter a word, then links to its definition. ♦

Sandra, a Toronto-based computer consultant, can be reached at [mingail@idirect.com](mailto:mingail@idirect.com).

## FLAT RATE INTERNET ACCESS

**\$9.95/MONTH OR \$19.95/MONTH**

- NO SETUP FEE
- TECH SUPPORT
- LOW USER / LINE RATIO

### FULL RANGE OF CORPORATE SPECIALS

Web Page Publishing

Web Site Hosting

Domain Name Registration

- NO PRIME TIME FEES
- 33.6 KBPS MODEMS
- FREE SOFTWARE

NEW!

ISDN & 56K FLEX CONNECTIONS  
FOR AS LOW AS \$9.95/MONTH

### E-MAIL "Corporate & Family Services"

Need an extra e-mail account for an employee or family member? Would you like your own domain name or permanent e-mail address? POP accounts - \$3.00 /month E-mail aliases and e-mail forwarding \$1.00 /month

Dial Up Account Includes  
WWW-Newsgroups - Chat - E-mail - FTP

## INTERNET LIGHTSPEED

**482-1190**

DIV. OF WARLIGHT INDUSTRIES INC. - SINCE 1987

E-mail: [info@lightspeed.bc.ca](mailto:info@lightspeed.bc.ca) Web Site: <http://lightspeed.bc.ca>



**ICI COMPUTER**

**TEL: 273-1368**  
**TECH: (604) 273-9550**  
**FAX: (604) 278-5268**

**Business Hour:**  
 Mon-Sat: 10-7, Sun: 11-7

Email: [emailici@icicomputer.com](mailto:emailici@icicomputer.com)  
 Web Site: <http://www.icicomputer.com>

## MMX Power Station

### Intel P-166/ MMX-166

Pentium 166/ MMX 166 CPU  
 512K Pipeline Burst Cache  
 16MB EDO RAM (Exp. to 256MB)  
 2.1GB E-IDE HDD (Mode 4)

Fujitsu 1.44MB 3.5" FDD  
 PCI 64bit 1MB MPEG Card  
 14" N-I-L-R SVGA Monitor

104 (Windows 95) Keyboard  
 Mid-size Tower Case

MS-Comp. 3B Mouse + Pad  
 EIDE 24x CD-ROM

16 bit PnP Sound  
 60W Amp. Stereo Speakers

2-year service & 1-year parts warranty

**Options:**

Acer 33.6K VoiceModem +\$80/ Windows 95(SR II) +\$125  
 32MB RAM (from 16M) +\$45/ 2.5G HD (from 2.1G) +\$25  
 Microsoft Office 97 Small Business Edition +\$268

**P-166**  
**888**  
 \$29/mo\*

**MMX-166**  
**918**  
 \$30/mo\*  
 Financing Available

### MMX-166/200/233

Pentium MMX 166/200/233MHz CPU  
 512K Pipeline Burst Cache  
 32MB EDO RAM (Exp. to 256MB)  
 2.1GB Ultra DMA HDD

Fujitsu 1.44MB 3.5" FDD  
 PCI 64bit 2MB MPEG Card  
 15" N-I-L-R SVGA Monitor

104 (Windows 95) Keyboard  
 Mid-size Tower Case

Genius NetMouse + Pad  
 EIDE 24x CD-ROM

16 bit PnP Sound  
 60W Amp. Stereo Speakers

Microphone & Encyclopedia CD Pack

**5-year service & 2-year parts warranty**

**Options:**

Acer 33.6K VoiceModem +\$80/ Windows 95(SR II) +\$125  
 64MB RAM (from 32MB) +\$85/ 3.2G HD (from 2.1G) +\$65  
 Microsoft Office 97 Small Business Edition +\$268

**MMX-166**  
**1118**  
 \$36/mo\*

**MMX-200**  
**1168**  
 \$37/mo\*  
 Financing Available

**M-233**  
**1248**  
 \$40/mo\*

### P-II 233/266/300

## P-II Ultimate Solution

### Pentium II 233/266/300

Intel Pentium II 233/266/300 MHz 512K Cache  
 Intel 440LX Chipset AGP Mainboard  
 32MB SDRAM (10 ns) (Exp. to 384MB)  
 2.1GB Ultra DMA HDD

Fujitsu 1.44MB 3.5" FDD  
 PCI 64 bit 2MB MPEG Card

15" N-I-L-R SVGA Monitor

104 (Windows 95) Keyboard  
 ATX Tower w/ 235W P/S

Genius NetMouse + Pad  
 EIDE 24x CD-ROM

Acer FX-3D 16 PnP  
 60W Amp. Stereo Speakers

**5-year service & 2-year parts warranty**

**Options:**

Acer 56K VoiceModem +\$110/ Windows 95(SR II) +\$125  
 64MB RAM (from 32M) +\$85/ 4.3G HD (from 2.1G) +\$110  
 Upgrade to AGP 4M RAMBUS +\$55

**P-II-233**  
**1528**  
 \$49/mo\*

**P-II-266**  
**1678**  
 \$55/mo\*  
 Financing Available

**P-II-300**  
**1898**  
 \$61/mo\*  
 Financing Available

### P-II 233/266/300/333 w/AGP

Intel Pentium II 233/266/300/333MHz 512K Cache  
 Asus P2L97 440LX AGP Motherboard  
 32MB SDRAM (10 ns) (Exp. to 384MB)  
 3.2GB Ultra DMA HDD

Fujitsu 1.44MB 3.5" FDD  
 AGP 4MB RAMBUS Video

Viewsonic 15" Monitor

104 (Windows 95) Keyboard  
 ATX Tower w/ 230W CSA P/S

Genius NetMouse + Pad  
 Panasonic 24x CD-ROM

Soundblaster AWE 64 PnP  
 180W Amp. Stereo Speakers & Mic.

**5-year service & 2-year parts warranty**

**Options:**

USR 56K VoiceModem +\$168/ Windows 95 (SR II) +\$125  
 64MB SDRAM (from 32M) +\$85/ 6.4G HD (from 3.2G) +\$150  
 Microsoft Office 97 Small Business Edition +\$268

**P-II-266**  
**1948**  
 \$63/mo\*  
 Financing Available

**P-II-300**  
**2168**  
 \$70/mo\*  
 Financing Available

**P-II-333**  
**2498**  
 \$81/mo\*  
 Financing Available

## Server

### Dual Pentium-II Server

Pentium II 266/ 300/333MHz (w/ one CPU)

Asus Dual Pentium II Motherboard  
 AHA 7880 Ultra Wide SCSI Controller

64MB SD DIMM RAM (max. 384MB)

4.33GB Ultra SCSI Hard Drive

SVGA 1MB PCI Video Adapter

24X SCSI CD-ROM

1.44 MB FDD

ATX Tower w/230W P/S

104 Keyboard / Mouse

**5-year service & 2-year parts warranty**

\$83/mo\*

**P-II 266**  
**1998**  
 \$65/mo\*

**P-II 300**  
**2228**  
 \$72/mo\*

Options: Second P-II 266/ 300 CPU +\$598/ 868

## TOSHIBA

### 440CDX P133MMX/ 16M/ 1.35G/ 12.1" DSTN/ 10X

50CT P75 16M 810MB 6.1TFT 1.8LB  
 70CT P120MMX 16M 1.5G 6.1TFT 1.88 LB  
 440CDX P133MMX 16M 1.35G 12.1DSTN 10X  
 440CDT P133MMX 16M 1.35G 12.1TFT 10X 33.6K  
 460CDX P166MMX 32M 2.1G 12.1DSTN 10X  
 460CDT P166MMX 32M 2.1G 12.1TFT 10X 33.6K  
 480CDT P233MMX 32M 3.86G 12.1TFT 10X  
 750DVD P233MMX 32M 5.1G 13.3TFT DVD 33.6K

### 310ED P-133MMX/ 16M/ 1.6GB/ 12.1" DSTN/ 10x

310ED P133MMX 16M 1.6G 12.1DSTN 10x  
 380E P150MMX 16M 2.1G 12.1DSTN  
 380D P150MMX 16M 2.1G 12.1TFT 8x CD  
 380ED P166MMX 16M 2.1G 12.1DSTN 20x CD  
 380ED P166MMX 16M 3.0G 12.1TFT 20x CD  
 560X P233MMX 32M SD 4G 12.1TFT  
 770 P200MMX 32M 3.2G 13.3TFT  
 770 P233MMX 32M 4.0G 13.3TFT

## IBM SPECIAL

### 310ED P-133MMX/ 16M/ 1.6GB/ 12.1" DSTN/ 10x

310ED P133MMX 16M 1.6G 12.1DSTN 10x  
 380E P150MMX 16M 2.1G 12.1DSTN  
 380D P150MMX 16M 2.1G 12.1TFT 8x CD  
 380ED P166MMX 16M 2.1G 12.1DSTN 20x CD  
 380ED P166MMX 16M 3.0G 12.1TFT 20x CD  
 560X P233MMX 32M SD 4G 12.1TFT  
 770 P200MMX 32M 3.2G 13.3TFT  
 770 P233MMX 32M 4.0G 13.3TFT

## HITACHI

### VB Plus P150MMX/ 16M/ 1.4G/ 12.1" DSTN/ 10x/ 33.6K

VB Plus P150MMX/16M/1.4G/12.1DSTN/10x/CD/33.6K  
 VB Plus P166MMX/16M/2.1G/12.1TFT/10x/CD/33.6K  
 VB Pro P133MMX/16M/1.4G/12.1TFT/10x/CD/56K  
 VB Pro P166MMX/32M/2.1G/12.1TFT/10x/CD/56K  
 391C P133MMX/16M/1.6G/12.1DSTN/20x/CD/33.6K  
 392C P150MMX/16M/2.1G/12.1DSTN/20x/CD/33.6K

## Motherboard

30pin 1MB / 4MB

4M EDO/ Reg.

8M EDO/ Reg.

16M EDO/ Reg.

32M EDO/ Reg.

32M SD 168pin DIMM

64M SD 168pin DIMM

128M SD 168pin DIMM

AMD CPU

K6 MMX-166/200/233

Intel CPU

P-155/166

MMX-166/200/233

P II 233/266/300

Asus TXP4 512K

Asus TX97 / ATX 512K

HT VX Pro / TX Pro 1M Cache

LuckyStar VX / TX

Spacewalker TX

Pentium II Motherboard

Asus P2L97 (440LX)

Asus P2L97S w/ UW SCSI

Asus P2L97DS Dual/ UW SCSI

Spacewalker 440LX

Intel AL440LX / LXG

LuckyStar 440LX

30pin 1MB / 4MB

4M EDO/ Reg.

8M EDO/ Reg.

16M EDO/ Reg.

32M EDO/ Reg.

32M SD 168pin DIMM

64M SD 168pin DIMM

128M SD 168pin DIMM

AMD CPU

K6 MMX-166/200/233

Intel CPU

P-155/166

MMX-166/200/233

P II 233/266/300

Asus TXP4 512K

Asus TX97 / ATX 512K

HT VX Pro / TX Pro 1M Cache

LuckyStar VX / TX

Spacewalker TX

Pentium II Motherboard

Asus P2L97 (440LX)

Asus P2L97S w/ UW SCSI

Asus P2L97DS Dual/ UW SCSI

Spacewalker 440LX

Intel AL440LX / LXG

LuckyStar 440LX

30pin 1MB / 4MB

4M EDO/ Reg.

8M EDO/ Reg.

16M EDO/ Reg.

32M EDO/ Reg.

32M SD 168pin DIMM

64M SD 168pin DIMM

128M SD 168pin DIMM

AMD CPU

# 56K draft standard accepted

High-speed modem connectivity has taken a step forward with the approval in early February of the V.90 draft standard for 56Kbps modems by the International Telecommunications Union (ITU). This paves the way for modem manufacturers to put an end to the X2 versus K56Flex incompatibility problems, and to release products that can communicate with any other V.90-compliant modem at 56Kbps.

Anticipating this, 3Com and Lucent announced interoperability testing between their products in January, and have invited other modem manufacturers to participate. Most manufacturers have promised purchasers of their proprietary 56K modems free upgrades to the new standard, which could be available as early as late February. New V.90 modems are expected in March.

The standard is expected to receive final

approval at the September ITU meeting.

"With a draft formal standard completed, [V.90] modems will quickly become the most common way to access Internet networks, and are likely to remain so for some time," according to Kent Krechmer, editor of *Communications Standards Review*.

According to modem manufacturers Hayes, Cisco Systems, and Ascend Communications, however, there's still work to be done before they release new V.90 products. Implementations differ among vendors, so compatibility testing among modem vendors and Internet service providers must be completed. 3Com is spearheading this effort with its V.pcm Interoperability Testing Program, offering client modem developers dial-in access to servers, and reciprocating by calling other manufacturers' servers with its client modems.—Lynn Greiner

such as an articulating keyboard arm and a document holder, I don't have a real problem with the IKEA office," says Duffy.

"However, with the Steelcase office, you are not getting a tenfold increase in features for the price difference."

"This is a shame because Steelcase has some nice items."

## Home office furnishing...

continued from page 17

lacquered steel with an adjustable arm and head, and a 20-watt halogen bulb, the lamp helps to add a cool dash of style to this office suite.

"Although both offices need accessories,

## Software...

continued from page 19

es the computer, and a tic-tac-toe game that lets a player mark a square just by looking at it.

Future interfaces will involve 3D and video, making a computing environment that perhaps will owe more to the current crop of (say) Windows 98. Right now, a freely available product of Microsoft Research is Comic Chat—changing the way Internet chat rooms work, by evolving the interface from lines of text to a familiar comic book metaphor. Coming up will be 3D V-Chat, turning the flat, 2D comic strip environment into a richer, 3D setting more like a video game.

On another level, Microsoft Research hopes to bring us the world... literally. Along with Digital Equipment, they're involved in Terra Server, a project to bring the entire world online. No, not by giving us all Internet connections, but by posting a multi-terabyte

(that's trillions of bytes) database of images of the Earth, obtained both from U.S. Geological Survey flights and Russian satellite pictures. Users will be able to close-focus in on the images, down to an ultimate resolution of 1 to 2 square meters—in other words, be able to see actual cars parked in the street in front of your house (at least at the time the picture was taken).

Look for Terra Server to be available on-line soon—perhaps by the time this article appears in print.

Increasingly powerful, affordable computers will power a change from computer as word-processor productivity tool to computer as more human-seeming, intelligent, adaptive (as well as simpler) communications and collaboration assistant.

Should be fun!

(Check in with Microsoft Research at <http://research.microsoft.com>) ♦

Alan Zisman can be contacted by email at [azisman@mail.bc.rogers.wave.ca](mailto:azisman@mail.bc.rogers.wave.ca).

## HOME OFFICE CONTEST

Enter the contest by providing *Computer Player!* with your wish list of IKEA home-office products that total \$1,000.

IKEA will provide the winner with his or her personal home office furniture worth up to \$1,000 (shipping and installation provided). To make your selection, see the home-office items featured on page 14 or call 1-888-225-4532 Ext. 130 to receive a catalogue of IKEA business products.

Please address your entry form to: **IKEA Home Office Contest**, and fax to: 604-608-2686 or mail to 503-425 Carrall St., Vancouver, B.C., V6B 6E3, by April 24, 1998.

### HOME OFFICE CONTEST ENTRY FORM

1. Name: \_\_\_\_\_
2. Phone: \_\_\_\_\_
3. Address: \_\_\_\_\_
4. Please indicate your age:  Under 18  18 - 34  35 - 49  50 - 64  65 or older
5. How do you use your home office? (Check all that apply)
  - Household management or homework
  - Your own for-profit business
  - Moonlighting
  - Bringing work home from a central office
  - Not-for-profit business
  - Telecommuting
  - No
6. Do you subscribe to an online service?  Yes
7. Have you ever made a purchasing decision based on info you read in CC??
  - Yes, my decision was based on  Advertising  Editorial
  - No
8. My \$1,000 IKEA home office consists of: (Please list name & value of each item selected.)
 

1.	4.
2.	5.
3.	6.

**Prize:** One IKEA home office with a retail value of 1,000 (one thousand) dollars. Value does not include taxes, delivery service, or assembly service. Delivery service will be provided by IKEA depending on the winner's geographic proximity to the store. Prize must be claimed at an IKEA store by May 31, 1998. Winner must provide valid identification upon claiming prize. The prize awarded is not transferable and cannot be redeemed as cash.

**Eligibility:** To enter and to be eligible to win, a person must be a resident of Canada, over the age of majority, and not an employee or be domiciled with an employee of Canada Computers, its affiliate companies, or advertising and promotional agencies. Employees or individuals domiciled with employees of IKEA, its affiliate companies, or advertising and promotional agencies are also not eligible to enter this contest.

**Selection process:** The winner will be selected at random by Canada Computers on May 1, 1998 from among all qualifying entries received on or before contest close date and must meet eligibility requirements. Winner will be contacted by telephone for one week and if s/he cannot be contacted, another entrant will be selected at random.

# Taking your access on the road

BY ALAN THWAITS

Everyone seems to be on the move these days. Whether it's March break or business travel, the roads, planes, and trains are busier than ever. And, because we're living in the Information Age, folks want to stay connected. Why, oh why, they say, should I have to give up my email and Web habits just because I'm not at home?

They're absolutely right—being mobile doesn't have to mean being unconnected. And it's now easier and cheaper than ever to have your mail and move it, too. Here are



CompuServe,  
<http://www.compuserve.com>  
 AOL, <http://aol.com>  
 IBM.NET, <http://www.ibm.net>  
 Internet Direct,  
<http://www.idirect.com/ippas>  
 Email: roaming@idirect.com

some of the options available to the business or casual user of Internet access.

A tried and true option for staying connected is one of the major online services. The only ones that really matter these days are CompuServe and AOL. That's partly because they've combined a large number of worldwide access points (CompuServe, offers connectivity from more than 185 countries) with ease of use. Pricing for a basic access package for both AOL and Compuserve is US\$9.95 per month.

If you are connecting for business purposes, you may want to subscribe to one of the "big business" ISPs, such as IBM.NET. This service was recently voted top Internet provider by *PC World* magazine. It offers access from more than 1,070 IBM local dial-in numbers in over 50 countries, including over 550 local dial numbers in the United States and Canada. As an added bonus, most of those local access points provide service with speeds up to 56Kbps. IBM.NET's Canada Comprehensive Plan will cost you \$29.95 per month for 100 hours, and \$2 per hour over that maximum.

## Roamin' empire

Some users don't want to hook up to a national provider, preferring to use the services of a local ISP. In the past, that loyalty meant you'd be lost in the ozone when outside of the ISP's area. In order to offer customers enhanced service, many medium-sized ISPs now offer roaming services, such as iPass, a new service being marketed by Toronto-based Internet Direct. If you're an IDirect subscriber using iPass, you get the best of both worlds—the personal service of a smaller ISP and access from 1,450 points of presence in 150 countries.

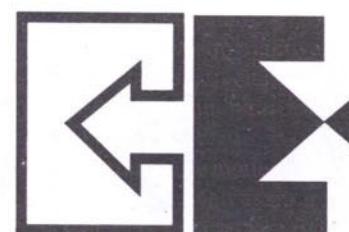
When you're on the road, simply fire up your iPass Wizard software, and dial in to a local provider on the iPass system. Costs are

based on hourly use—\$4 per hour for Canada and U.S. sites, \$5.25 to \$9 per hour for international sites, and \$15 per hour for some

"remote" international points.

With a little planning, and some help from the Internet, you can take it with you! ♦

BRAND NEW SAMPLE & USED PARTS DEAD & DAMAGED UPGRADES



# OUTLET

CE COMPUTER OUTLET  
 118-4800, No.3 Road, Richmond, B.C. Canada V6X 3A6  
 Tel: (604) 278-2633 Fax: (604) 278-2661

**ATTN: Students, Electronic hobbyists & Smart buyers.**

Build your own system or  
 upgrade your system from 486 to Pentium system.  
 We have a huge selection of new items in-stock.

**WE TAKE TRADE-INS TOO!!**

### STORE HOURS

Monday-Friday  
 11:00am - 7:00pm  
 Saturday  
 11:00 am - 6:00pm  
 Sunday & Holidays  
 closed

- ◆ NEW AND USED COMPUTER PARTS & COMPONENTS.
- ◆ WE ALSO PROVIDE SERVICE, MAINTENANCE, REPAIR AND UPGRADE OF COMPUTER SYSTEMS.
- ◆ WE PROVIDE SERVICE FOR CHANGING POWER SUPPLY COOLING FAN AND MONITOR REPAIR TOO !
- ◆ FREE ESTIMATES BEFORE ANY WORK REQUEST.

### INTEL PENTIUM SYSTEMS

#### PENTIUM II SYSTEMS

PII - 233	\$1600
PII - 266	\$1745
PII - 300	\$1950

- \* With Intel CPU & fan
- \* ASUS P2L97, 440LX AGP MB
- \* 32MB SDRAM (168 Pin)
- \* 3.2 GB UDMA HDD
- \* 1.44MB (3 1/2") Floppy
- \* ATI 3D XPRESSION
- /4m SGRAM Video Card
- \* 15" N/I L/R SVGA .28dp, Monitor
- \* ATI Mid Tower Case
- \* 104 Windows 95 Keyboard
- \* Logitech 2 button Mouse & Pad

#### PENTIUM-MMX SYSTEMS

P-166MMX	\$870
P-200MMX	\$910
P-233MMX	\$1000

- \* With Intel CPU & fan
- \* Intel Triton Chipset Motherboard w/512K PIPE LINE Burst RAM
- \* 16MB EDO RAM (72 Pin)
- \* 2.1 GB UDMA HDD
- \* 1.44MB (3 1/2") Floppy
- \* ATI PCI Video Card (MPEG /1MB)
- \* 14" N/I L/R SVGA .28dp, Monitor
- \* 15" Tower Case
- \* 104 Windows 95 Keyboard
- \* Mouse & Pad

### UPGRADES

#### Multimedia Package

- 24X CD-ROM
- Sound Blaster 16 Plug & Play
- 80w Speakers (Amp.)

+ \$180

#### Modem/ Fax

- 33.6 S/R Voice
- 56 S/R Voice

+ \$70

#### Memory

- 16MB to 32MB (EDO RAM)
- 32MB to 64MB (SDRAM)

+ \$50

#### Hard Drive

- 2.1GB to 3.2GB (UDMA)
- 3.2GB to 4.3GB (UDMA)
- 4.3GB to 6.4GB (UDMA)

+ \$40

+ \$50

+ \$115

#### Monitor

- 14" N/I L/R SVGA .28dp
- 15" N/I L/R SVGA .28dp
- 15" N/I L/R SVGA .28dp

+ \$80

+ \$100

#### Video Card

- ATI Mach64 SDRAM 3D/4m

+ \$90

#### Printer

- Canon BJC-4300C

+ \$280

### TWO YEARS PARTS & LABOUR WARRANTY FOR SYSTEMS

#### Company Policy

- No cash refund
- No guarantee on availability of advertised items
- Most items have limited quantity, ie first come first serve basis.
- All sales are final.

- All above prices are for cash & carry only

- No visa or cheque will be accepted

- All brand new items have 1 year warranty

- All used parts \* components have 30 days warranty.

- All obsolete & damage items have no warranty.

樣品和舊電腦 舊零件 損壞的電腦和零件 全新電腦和大量零部件



# NetNation

Communications (Canada) Inc.



## Canada's #1 High-Performance WEB HOST

We are NOT  
a Dial-Up  
Service!

### FEATURES:

- **155 Mb/sec** Fiber-Optic (3 times faster than a T3)
- **99.98% uptime**
- Your domain name\* \* (www.your\_name.com)
- 50 MB disk space
- 1,000 MB traffic/month (100,000 hits)
- Unlimited e-mail forwarding
- 10 POP accounts
- FrontPage™ '98 support
- Detailed web usage statistics
- TrueSpeech™ support (Real-time audio)
- Custom CGI scripts
- SSL™ supported for secure transactions
- Cybercash
- Shopping Cart
- Autoresponders



approx.  
**Cdn\$2900\***

/month  
CDN\$72<sup>50</sup>  
set-up

\* Because of our international billing system, the actual price may vary depending on the Cdn/US exchange rate on the day of purchase.

30 DAY  
MONEY BACK  
GUARANTEE!

**ATTENTION  
RESELLERS &  
WEBMASTERS!**  
Offer web hosting services  
to your customers at a  
**HUGE DISCOUNT!**

**Call Vancouver : (604) 688-8946**  
**E-mail our Sales Dept : sales@netnation.com**  
**Visit our website : www.netnation.com**  
**Fax us at: (604) 688-8934**

New York	San Francisco	Toronto	London	Paris	Amsterdam	Frankfurt	Sydney
Tel: 212.208.2496	415.680.2447	416.352.5051	+44.171.681.1863	+33.15.301.3154	+31.20.524.1473	+49.69.25577.013	+61.29.475.0232
Fax: 212.208.2498	415.680.2494	416.352.5052	+44.171.681.1862	+33.15.301.3155	+31.20.524.1472	+49.69.25577.012	+61.29.475.0231

\*\*US\$100 domain name registration fee is required by InterNIC (third party entity)

All trademarks are the property of the respective owners.

## Domain Name REGISTRATION

**The Internet's LARGEST  
Source of Registration  
and Information**

Domain-Name Registration Rate is  
200,000 per month worldwide!

**NetNation & InterNIC Sign  
Partnership Agreement**

### New Popular Domain-Names

.NU .TO .CC

### GLOBAL Domain-Name Registration

.COM .NET .ORG .EDU .GOV

Free\* for the first domain

\$19.95/domain thereafter

\*Not including InterNIC fee

### REGIONAL Domain-Name Registration

APNIC: Asia-Pacific Region

IANA: .US Domains

InterNIC: Worldwide

NUMNet: .NUM (number) Domains

RIPE NCC: European Region

### COUNTRY Domain-Name Registration

.AU .BE .BR .CA .CH .CL .HK .LI

.MX .MY .NU .SG .TH .UK .US

### Personalized E-mail

anything@your\_domain.com

**E-mail:**  
**sales@domain-registry.com**

Visit our **Web site:**  
**www.domain-registry.com**

Top Quality! Best Service! Low Low Price!

# MultiLink

8227

## Computers & Communications Inc.

### Pentium Systems

Intel Pentium 150/166/200 MHz CPU  
256K PB Cache  
8MB RAM (exp. 128MB)  
2.0 GB EIDE Hard Drive  
1.44MB Floppy Drive  
PCI Video Card w/1M (exp. to 2M)  
14" NI, SVGA, 1024x768 .28 Monitor  
13"-tower Case w/230W PS  
104 Win'95 Enhanced Keyboard  
Logitech 2B Mouse  
One month free internet access

**\$779/\$799/\$899**

### M2 / K6 mmx Systems

Cyrix M2-166/200//AMD K6-166/200/233 CPU  
512K Pipe-line Burst Cache  
16MB RAM (exp. 128MB)  
2.0GB EIDE Hard Drive  
1.44MB Floppy Drive  
PCI Video Card w/1M(exp. to 2M)  
15" NI, LR, SVGA, 1024x768 .28 Monitor  
13"-tower Case w/230W PS  
104 Win'95 Enhanced Keyboard  
Logitech 2B Mouse  
One month free internet access

**\$799/819//859/889/929**

### Pentium mmx Systems

Intel Pentium MMX166/200/233 MHz CPU  
512K Pipe-line Burst Cache  
16MB E.D.O. RAM (exp. 128MB)  
2.0GB EIDE Hard Drive  
1.44MB Floppy Drive  
PCI Video Card w/ 1M RAM  
15" NI, LR, SVGA Monitor  
13"-tower Case w/230W PS  
104 Win'95 Enhanced Keyboard  
Logitech 3B Mouseman  
One month free internet access

**\$859/\$889/\$979**

### Pentium II Systems

Intel Pentium PII 233 / 266 / 300 / 333MHz CPU  
512k Pipe-line Burst Cache  
32MB SDRAM / 1.44MB Floppy Drive  
3.2 GB UDMA Hard Drive  
ATI ProTurbo Video Card /4M  
24X CDROM / 60W Amplified Speakers  
Sound Blaster 64AWE  
56K Int.MODEM, Voice/Data/Fax  
15" NI, LR, SVGA Monitor  
19" Tower ATX Case w/250W ATX Power Suply  
104 Win'95 PS2 Enhanced Keyboard  
Logitek 3B Mouseman / One mth free internet access

**\$1749/1899/2099/2449**

### Dual Pentium PII (with One CPU)

Intel Pentium II 233 / 266 / 300 / 333 MHz CPU  
512k Pipe-line Burst Cache  
32MB SDRAM  
3.2GB EIDE Hard Drive/ 1.44MB Floppy Drive  
ATI 3D+ ProTurbo / 4MB  
24X CDROM / 60W Amplified Speakers  
Sound Blaster 64AWE / 56K Int.V/Fax/DataMODEM  
15" NI, LR, SVGA Monitor  
19" ATX-Tower Case w/ ATX 250W Power Supply  
104 Win'95 Enhanced Keyboard, PS2  
Logitek 3B Mouseman  
One month free internet access

**\$1949/2099/2299/2649**

### Upgrade Options:

8MB to 16MB .....+\$26  
16MB to 32MB .....+\$49

1.6GB->2.0GB->2.5GB HD.....+\$20 / \$20  
2.5GB->3.0GB->4.0GB HD.....+\$30 / \$20

### Multimedia 24 X Kit / 32X Kit.....\$179 / \$209

Includes: 24X/32X CD-ROM/16 Bit Full Duplex 3D Sound Card  
Multimedia Stereo Speakers / 48 CD titles with encyclopedia

### Use Asus M/B

+\$60

14" Monitor ---> 15"---> 17" ...+\$70 / \$230

### Memory

30 Pin 1M/4M.....	\$6/16
72 pin 4M .....	\$16
72 pin 8M .....	\$29
72 pin 16M .....	\$49
72 pin 32M .....	\$95
72 pin EDO 4M.....	\$15
72 pin EDO 8M .....	\$25
72 pin EDO 16M .....	\$49
72 pin EDO 32M .....	\$89
168p DIMM 32/64M SDRAM	\$95/259

### Printers / Scanner

Canon BJ-80/250C/4300.....	\$359/\$189/269
Canon BJ-4550 (11"X17").....	\$439
HP DeskJet 670C/ 692C .....	\$269 / \$299
HP Deskjet 722C/ 890Cxi.....	\$419 / \$589
HP Deskjet 1600C .....	\$1799
HP LaserJet 5/5N/5M/5Si.....	\$1389/1799/2099/3249
HP LaserJet 4V/4M+/4MV.....	\$2549/\$2610/3549
HP 6L / 6P / 6MP.....	\$509 / \$949 / \$1199
Brother HL-720, 600dpi, 6ppm.....	\$369
Brother HL-730, 600dpi, 6ppm.....	\$439
Brother HL-760, 1200dpi, 6ppm .....	\$539
Epson Stylus 400/600/800.....	\$269/\$339/\$499
Epson Stylus Photo .....	\$509
Lexmark 2030/2050/7000.....	\$249/\$289/\$469
HP ScanJet 5S/5P/4C.....	\$269/\$339/\$939
UMax s6e lite/full.....	\$395/\$795
MicroTek E3/E6.....	\$199/\$469

### Monitors

Proview 14"/15"/17" .....	\$179/\$249/\$469
KOMODO 15" / Azura15".....	\$255
Daytek 14"/15"/17" .....	\$209/\$279/\$539
Acer 14"/15"/17" .....	\$219/\$289/\$539
MAG 17" DJ700/700T.....	\$789/\$859
ADI 4V 15"/5V 17" .....	\$399/669
ViewSonic 15"GS/17"G771.....	\$449/\$699
NEC 15" C500/ M500.....	\$479 / \$519
NEC 17XV+/M700/P750.....	\$909/\$1029/\$1069
NEC 17" A700/E700.....	\$779/\$919
SONY 100Sx/100 Sf.....	\$499/\$589
SONY 200Sx/200 Sf/SE2T....	\$849/\$1029/\$1039

### Multimedia/CD Writer

16 Bit PnP Sound Card .....	\$23
Sound Blaster 16 PnP.....	\$52
Sound Blaster 64 AWE / Gold....	\$105/\$259
24X CDROM Panasonic/Acer .....	\$89
24X CDROM Toshiba/Sony.....	\$99
32X CDROM Drive.....	\$115
SCSI CD-ROM 12X / 24X .....	\$129/\$159
Toshiba DVD Drive.....	\$199
PC-DVD Encore Dxr2.....	\$429
USR Big Picture Camera/Capture Card.....	\$249
Sony 926S CD-Writer/+software.....	\$399/469
Sony 928E IDE CD-Writer/+software	\$429/\$489
Yamaha CDR400 , SCSI Int./Ext.,.....	\$569/679
Yamaha CRW4260, SCSI2 Int./Ext.....	\$649/769
Yamaha CRW4001, IDEI Int.....	\$Call
HP Surestore Re-Writable CD 7100i/e ..	\$549/679
Blank CD: Recordable/Re-Writable....	\$4/29

### Modem

33.6/56 Kbps Int. Voice/Fax/Data....	\$55/99
Diamond Supra, Int. 33.6/56K.....	\$85/\$145
USR 33.6/56K Int. Fax/Data.....	\$109/\$159
USR 33.6/56K Int. Voice.....	\$119/\$165
Motorola, Int., 33.6 / 56 .....	\$89/\$129
Ext. 33.6K Voice/Fax/Data.....	\$105
PCMCIA 28.8/ 33.6K Fax/Data..	\$139/149

### Keyboard / Mouse / Case

104 for Win95 / Fujitsu 8725/4725..	\$18/\$30/\$55
Logitech MouseMan Serial/Bus.....	\$29/\$89
Case 13"/15"/19"/25" .....	\$35/\$39/\$49/\$95
ATX Case 19"Tower/25"Full size .....	\$79/\$99

### Motherboard with CPU

P150/166/200 MHz....	\$219/249/369
MMX 166/200/233....	\$259/289/379
PII 233/266/300.....	\$629/789/979
AMD K5 75/100.....	\$139/169
AMD K6 166/200/233.	\$269/319/349
686 P150+/166+/200+.	\$179/189/219
686 M2 166/200 MMX.....	\$209/229
CPU Cooling Fan.....	\$ 8

### Hard Drive

1.6 GB EIDE .....	\$169
2.0 / 2.5GB EIDE .....	\$189 / \$209
3.1 / 3.2GB U-DMA.....	\$249 / \$249
4.0 / 4.3GB U-DMA.....	\$269 / \$289
6.4 / 8.4 GB U-DMA.....	\$389 / \$509
2.1GB SCSI-2 .....	\$349
3.1GB SCSI-2 .....	\$439
4.2/6.0GB SCSI-2.....	\$489 / \$669

### Tape / Zip / Jaz Drive

Zip Drive, 100MB, Int/Ext.....	\$149/\$189
Jaz Drive, Iomega ,1G, Int/Ext.....	\$399/\$525
LS120 Drive, Int.....	\$149
Zip 100MB/Jaz 1GB Disk.....	\$16 / \$115
Colorado T3000 Int/Ext.....	\$239/\$309
Colorado T4000 Int/Ext.....	\$459/\$569
Iomega Ditto 2.0GB Int/Ext .....	\$179/\$249

At MultiLink Computers, we are fully committed to provide you with not only top quality products at low low price, but also excellent service. So whenever you need a system or upgrade/repair, come to see us. Our professional and friendly staff will do whatever they can to meet your needs.

Your Total Satisfaction Is Our Goal!

C:\ML-ADV\ADPL8227.CDR



Limited quantity. All prices are cash discounted and subject to change without prior notice.  
All systems have one year Parts and three years labor limited warranty.

### Business Hours

Mon.-Fri.: 10:00am-6:00pm  
Sat.,Sun.: 11:00am-4:30pm

150-12591 Bridgeport Rd., Richmond, BC, V6V 1J4

10-12851 Bathgate Way, Richmond, BC, V6V 1Y5

**Tel: 278-6805 Fax: 278-6653**

# The Mac gets a little respect

BY ALAN ZISMAN

They say confession is good for the soul. So I'd like to start off with a few. Like 90 percent or so of the world's computer users, I use Microsoft Windows. Unlike many of you, I've been using various versions of Windows for about a decade now, starting way back before it became the world's standard computer interface (let's save the debate on whether Microsoft is too powerful for another time, okay?).

I'm aware that an awful lot of what works well in Windows is copied from Apple's Macintosh. When I first started out using Windows, there was a series of ads from graphics-software company Micrografx promoting line of products for Windows users with "Mac envy" (I'm also aware that much of what works well on the Mac originated at Xerox's Palo Alto Research Centre).

Over the years, while Windows has been my primary computing platform, I've tried to remain reasonably familiar with Macs. While I've owned and continually upgraded PC machines running various generations of Windows, however, I've never owned a Mac. As much as possible, I've tried to be sensitive

to including Mac issues in my writing, but as a non-Mac owner, my perspective has inevitably been limited at best.

So, I went out and got myself a belated Christmas present. Contrary to current marketing trends, I bought a Mac. At this point, I've had the machine for about a month, so I can't present myself as any kind of an expert. My machine came with Mac OS version 7.5.3, not the new, fancy OS 8 and I haven't yet upgraded the operating system, so any comments may be specific to that older version. But here are a few first impressions.

#### Similar features

More things are similar than different between my Mac and my Windows 95 systems—the same applications, reading the same data files, working the same way. Most things work the way I'd expect them to. As a Windows user, it takes practice to remember to hold the mouse button down to keep menus down (something that, I gather, OS 8 changes). Windows 3.1 is noticeably clunkier than the Mac, but the Win95 interface and long file names make the two systems pretty

similar, at least on the surface.

With the Mac's PC Exchange system software, it's easy to move files from the PC to the Mac, and most standard applications can read

data from either platform. Add-ons like DataViz's Conversions Plus on the PC and MacLink Plus on the Mac translate between less-common file formats (and MacLink allows serial-port connections to shuttle back and forth files that are too big

to fit onto a floppy).

Much about the Mac's interface is, as its proponents have always claimed, elegant and intuitive. But as with the PC, there are also some things that are not particularly user-friendly. Does anyone discover on their own that Command+Shift+3 takes a screen shot? Is that more intuitive than the equivalent PrintScreen command in Windows?

Software and hardware add-ons are harder to find, as the Mac market shrinks. Adding RAM and an Ethernet card cost more on the Mac than for the PC.

I've had my share of system crashes and freezes, and had to struggle to discover which extension was incompatible with what soft-

ware. Some Windows users imagine that the Mac is more stable—I'm afraid not.

#### No right

There are things about Win95 I miss on the Mac: right-clicking to bring up context menus (also added in OS 8); the Control Panel's Device Manager, showing settings for all installed hardware; the Start Menu and Taskbar (which, ironically, can be added to the Mac with the shareware GoMac utility).

There's always been a love-hate relationship between Windows and Macintosh. The Mac did it first, and in many ways better; Windows started late, went through an awkward adolescence, but has grown up to dominate most areas of the market. As a result, many Mac users' attitudes towards the competition have evolved from amusement, to scorn, to a kind of fear. All of us have benefited over the years from a strong Apple. I hope the company manages to prosper.

Has the Mac stolen my heart? Is it so obviously superior or more fun that it will become my primary computer for work or play? I don't think so. It is, however, a solid platform that I will continue to use, and that deserves better than it's received, both from the press and from the market. ♦



## DO YOU WANT TO DO ANIMATION OR VIDEO EDITING ON YOUR PC?

### 3D ANIMATION

#### BECOME AN ANIMATOR

3D Studio MAX is finally here and it is HOT.... 3D Studio MAX directly competes with other high end 3D Graphics packages costing thousands of dollars more... Call today for Vancouver's best prices on both full packages and upgrades.

#### CALL Today for a DEMO

3D MAX for STUDENTS... \$895

IC Technology is Vancouver's Student and Institutional Authority for all Digital Video and Animation Products...

#### miro VIDEO DC30

Capture, edit, add special effects or titles to your video, mix CD-quality audio, and then output the final cut to video tape. Perfect for Wedding and Family Videos..... includes...

\$1295 Call Now For a Demo.....

Professional studio-quality nonlinear digital video and audio editing system. FULL ADOBE PREMIERE 4.2

FULL ADOBE PREMIERE 4.2

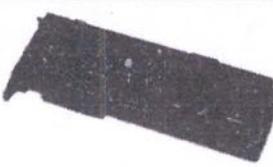
1252 Burrard St. - Vancouver.....

(604)681-7057

DUAL Pentium II Systems Available - Call for information....

### DIGITAL VIDEO

#### Broadcast Video at affordable prices



PCI bus, Component, S-Video & Betacam @ 60 fields/sec, 720x480 resolution. Real-time capture and playback of Video & Animation. Works with many powerful editing packages such as Speed Razor, Premiere and Video Action NT. \$2395.00

DPS AUTHORIZED  
FULL TURNKEY  
DUAL PENTIUM PRO SYSTEMS AVAILABLE



Outstanding PROFESSIONAL  
VIDEO quality from DPS  
(makers of the PAR). SCSI2,

#### MAKE AN IMPACT WITH YOUR PRESENTATIONS

#### PC to TV ENCODERS

#### AVerKey 3



\$495

Notebook, laptop, desktop with VGA output to TV, or VCR. Supports composite and S-Video output. All cables, 800X600 Flicker-free image in 16.7 million colours, Windows & DOS



\$249  
AVerKey Plus

An economical but also high quality and flicker free product with composite and S-Video out. 640 X 480 (NTSC) Flicker-free image in 16.7 million colours, Windows & DOS

# EXPLOSIVE Deals!

Pentium II  
\$1250  
See our special!

Check out our parts selection and save on your favorite brands!

intel<sup>AE</sup> AMD<sup>AE</sup>

USRobotics<sup>®</sup>

DIAMOND  
MULTIMEDIA

SAMSUNG

Quantum<sup>®</sup>

TOSHIBA<sup>AE</sup>

SONY<sup>AE</sup>

Panasonic<sup>AE</sup>

EPSON<sup>AE</sup>

YAMAHA<sup>AE</sup>

3M Innovation

Seagate

Now You See It.

AI

ALTEC  
LANSING  
MULTIMEDIA

FUJITSU

Western  
Digital

ASUS<sup>®</sup>

All brands and makes available.  
Call us for more information and current prices.



TO ORDER CALL  
433-7005

COME VISIT US  
2228 Kingsway  
Vancouver

Home or office PCs priced to fit you and your budget.

**BEGINNER SYSTEM**

6x86 166+ Processor  
16MB EDO RAM  
1.3GB Hard Drive  
12X CDROM Drive  
1.44MB FDD  
Pentium MMX PCI Motherboard  
Fast 64 bit PCI 3D Video Card  
16 bit Sound Card  
60W Multimedia Speakers  
33.6kps Internal Voice Modem  
Mouse & Pad and Keyboard  
14" Non-Interlace SVGA Monitor

**\$829**

**EXPERT SYSTEM**

200 MHz MMX Pentium processor  
32MB SDRAM  
3.2GB Ultra DMA Hard Drive  
24X CDROM Drive  
1.44MB FDD  
Pentium MMX PCI Motherboard 512K  
Diamond Stealth 3D, 2MB WRAM  
Sound blaster 16 PnP Sound  
60W Multimedia Speakers  
56K Internal Fax/Voice/Modem  
Mouse & Pad and Keyboard  
15" Non-Interlace SVGA Monitor

**\$1279**

Lease: \$47/mo.

**POWER SYSTEM**

266 MHz MMX Pentium II processor  
64MB SDRAM  
6.4GB Ultra DMA Hard Drive  
32X CDROM Drive  
1.44MB FDD  
ABit LX6 Motherboard, 440LX AGPset  
Millennium II Video, 4MB WRAM  
Sound blaster AWE64 Sound  
Yamaha M15 Multimedia Speakers  
56K x2 Internal Fax/Voice/Modem  
Mouse & Pad and Keyboard  
17" Non-Interlace SVGA Monitor

**\$2699**

Lease: \$97/mo.

This month's

**PENTIUM II SYSTEM  
Special**

233 MHz MMX Pentium II processor  
32MB SDRAM  
3.2GB Ultra DMA Hard Drive  
Pentium II Motherboard, 440LX AGPset  
AGP 3D Video, 4MB SGRAM  
1.44 Floppy Drive  
19" ATX Tower  
104 keys Windows 95 P/S2  
P/S2 Mouse and Pad

233Mhz Processor  
266Mhz Processor  
300Mhz Processor  
**\$1250**  
\$1450  
\$1750

Upgrade Options:  
64MB SDRAM \$75  
6.4GB Hard Drive \$170  
8.4GB Hard Drive \$270  
Diamond Viper AGP, 4MB \$145  
ATI Expert@Play AGP, 4MB \$160  
SoundBlaster AWE64 Sound \$100  
24X CDROM Drive \$95  
32X CDROM Drive \$125  
15" NI SVGA Monitor \$250  
17" NI SVGA Monitor \$475  
21" NI SVGA Monitor \$1600  
\*other options available.

See our Monthly Special and guarantee to be the

16MB EDO RAM \$35  
56K Modem \$99  
32X CDROM Drive \$120  
Fic PA 2007 mainboard VIA  
apollo chipset 1m L2 cache \$138  
A-BIT Lx6 440 P II mainboard \$225  
Pentium MMX PCI MB / 512K \$85  
Imation 120MB Portable Drive (parallel port) \$225 ★  
(after \$25 u.s send-in rebate \$189)

Data-Switch Parallel Printer Box \$15

**LOWEST  
PRICE!**

We service and  
repair computers.

We sell and upgrade  
notebooks and  
laptops.

In-house financing  
available.

Corporate sells  
welcome.

Office Hours  
Mon-Sat 10am-6:30pm  
Sun 11am-5pm



METRO  
COMPUTER GROUP INC.

2228 Kingsway, Vancouver, B.C., V5N 2T7 Tel: (604) 433-7005 Fax: (604) 433-7011 Email: [pcsnet@intergate.bc.ca](mailto:pcsnet@intergate.bc.ca)

\*Insignia Archetype, 1998. All trademarks and registered trademarks mentioned herein are the property of the respective holders. Metro Computer has the rights to change product specifications and prices without notice. Applicable taxes apply.



Looking for a venue for your next computer show or swap meet? Why not come see us at the North Surrey Recreation Centre! Our facility is centrally located in Surrey with easy access to the Skytrain, Bus service and major transit routes. We have over 15,000 sq/ft of open floor space and we can provide a variety of extra services; chairs, tables, refreshments etc. For more information call 502-6305.

North Surrey Recreation Centre  
10275 - 135th Street  
Surrey, B.C.  
(Across from Surrey Place Mall)



**Infoline** 501-5000 **DISCOVER**  
24 Hour Information

## Does your office have a recycling program?

Conserve our environment and **Save\$\$\$\$** at the same time

**Alouette Laser Products** helps you Reduce, Reuse and Recycle by Providing Remanufactured and Recharged Toner Cartridges and Drums for Most Laser Printers, Copiers and Fax Machines.

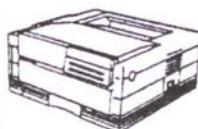
**Save up to 60%**

 We also carry other toners  
developers & drum units

## 100% Money Back Guarantee

### Laser Printer Repair

- Expert Service for HP & Most Other Brands
- Preventive Maintenance Available
- Call for Free Estimates
- 100% Satisfaction Guaranteed



**Free pickup and delivery in Greater Vancouver**

**Alouette**  
LASER PRODUCTS INC.

5158 Still Creek Ave.  
Burnaby, B.C. V5C 4E4

Call Today  
**291-8442**  
Fax **291-8435**

Column

# Installing multiple operating systems



**Linfield's Line**

**Kevin Linfield**

**M**y review of Caldera's OpenDOS (see <http://www.toronto-computers.com>) has generated quite a bit of email from the readers asking me for information about installing many different operating systems on their PCs. The following is an introduction to multiple operating systems, but I will be sharing more of my knowledge on this subject at random intervals over the next few months.

#### Before beginning

Before you start, back up everything! Make sure you know the type and model numbers of your hardware (CD-ROM, video, hard drive, mouse, and so on) and ensure that your hardware is compatible with all of the operating systems.

In most situations, you will want to install each operating system on its own hard drive partition. This means you need some method of repartitioning your hard drive(s) and some way to choose which operating system will boot. For repartitioning without destroying all of your data, I highly recommend PowerQuest's Partition Magic (<http://www.powerquest.com>), although there are a few freeware programs that claim to do this also (try the DOS programs FIPS or PRESZ111.ZIP at <http://www.simtel.com/archive/index.htm>).

Partition Magic also comes with IBM's Boot Manager (included with OS/2), which is an excellent boot utility (and the one I use), while Windows NT and Linux (with its Linux Loader (LILO)) both include a boot loader that can be configured for multiple operating systems. Of course, there are many commercial, shareware, or freeware booting programs available; if you are not going to run NT, Linux, or OS/2, check them out first. Recall that your BIOS starts the boot process by accessing the Master Boot Record (MBR), which can contain the boot process for a single operating system (like DOS or Win95) or a booting utility like Boot Manager or LILO.

#### OS quirks

Microsoft's operating systems like to be on your first primary partition (for a detailed explanation of primary/logical partitions, see next month's column). OS/2 and Linux can easily be installed anywhere (logical or primary partition on any hard drive) as long as you have Boot Manager or LILO configured properly. Note that if you are installing OS/2 on anything other than your first primary partition, you must install Boot Manager first (you can replace it after the install).

I always have each operating system on its native file system—this means FAT with DOS, FAT or FAT32 for Windows 95, NTFS for Windows NT, HPFS for OS/2, and EXT2FS for Linux. Since all of these operating systems can read and write to FAT partitions, I recommend having a separate FAT partition for sharing data between all operating systems. Of course, third-party device drivers exist for accessing different file systems from various operating systems—check out your favourite shareware/freeware site—but this is not recommended for regular access.

Another thing to note is that all Microsoft operating systems will disable LILO or Boot Manager when installing. No need to panic—just run FDISK (from whichever OS) to re-enable your boot program or boot from floppy disk and reinstall the boot loader.

#### Planning your hard drive

Even though you can install OS/2, Linux, Windows 95, and Windows NT onto your existing FAT DOS partition, I strongly recommend keeping everything separate so files aren't accidentally modified or replaced, and for ease of updating. As such, I have my first hard drive partitioned into three primary partitions (each being a C: drive, and each hidden from the other two) for OpenDOS/Windows 3.1, Windows 95, and Windows NT, and my second hard drive partitioned into four logical partitions (one for FAT data to share between all operating systems, one for OS/2, one for Linux, and one for Linux swap space). I use OS/2's Boot Manager to give me the choice of which operating system to start, although LILO would be my second choice.

For users who only have one hard drive, you may want to consider installing NT onto a logical drive, and having it start the boot process from your DOS or Windows 95 partition, and instead of using Boot Manager (which occupies a primary partition) use a commercial program like System Commander or one of the many shareware/freeware ones.

#### Vicious upgrade cycle

Most of the time, users want to install an upgrade over their existing (older) version. While this may initially save some time and effort, I feel that it would be detrimental in the long run.

I'm sure everyone has installed many programs that are no longer used, or have encountered "uninstall" routines that fail to uninstall an application. Whenever I upgrade (say from OS/2 3.0 to 4.0), I always back up everything, reformat the partition, and create a fresh install (one of the advantages of having separate boot partitions!). Yes, I usually have to install my applications again (especially in any flavour of Windows or Win-OS/2) but the response of the system is significant.

continued on page 36

#45 East Broadway  
Vancouver, B.C.,  
V5T 1V4, Canada  
Tel : (604) 875-8859  
Fax : (604) 875-8611  
Tech: (604) 879-6800  
E-mail: sales@atic.ca

## Fastest System!

### Intel PII-333mhz System \$2550

**\$2180**

for Intel PII MMX-300

Blank CD \$2.5  
Sony cd-r \$3.5  
24x 32x CD-ROM  
\$90/\$115

#### Optional : (w/system only)

MS WIndows'95 full ver. on CD.....+\$120  
MS Encarta'98 Home kit .....+\$80  
Canon BJC 4300C Printer .....+\$255  
15"17".28 SVGA 1280x .....+\$240/450  
ViewSonic G771/ G773.....+\$600/660  
ViewSonic P775/PT775 .....+\$780/930  
NEC A500/E500.....+\$400/500

## Pentium Pro (P6)

### Intel P6-180/200mhz...\$1150/1500

Intel Venus 440FX 2S,1P,EIDE, ATX  
32M EDO 72pin 60ns  
FD 1.44G  
3.2GB eide HD Mode 4  
Mystique220 3D 4MB w/MPEG  
17" ATX Tower case w/ATX power  
Fujitsu 8725 104 win95 keyboard  
Logitech mouse w/pad

### Intel Dual Pro-180mhz x 2...\$1500

### Intel Dual Pro-200mhz x 2...\$2300

(with Dual Pro motherboad and TWO CPUs)

## NetBook™ 12.1" TFT

### 12.1" TFT color screen.....\$2680.0

Intel 233 MMX Pentium CPU  
2M SVGA vedio  
32MB EDO ( 64MB .....+\$150)  
2.1GB Toshiba HD (3.1G....+\$180)  
1.44FD  
20x CD\_ROM  
16bit stereo sound card built-in  
33.6kVoiceFAXModem  
Touch Pad built-in and PS/2 mouseport  
2 PCMCIA slots  
InFra Port, serial ports, USB port  
parallel ports, Ext. SVGA port  
Microphone / speakers built-in  
keyboard, and carrying case

## NetBook™ 14.1" TFT

### • 14.1" TFT Notebook .....\$4290

4M SVGA card  
32MB EDO RAM ( 64MB.....+\$150)  
2.1G Toshiba HD ( 3.1GB.....+\$180)  
33.6k faxmodem (56k faxmodem....+\$50)  
1.44 Floppy  
USB, TV-output, Infra, GamePort  
Parallel, serial, 2 PCMCIA slots

**ATIC**  
Since 1989

W W W . a t i c . c a

## MMX-Systems

Intel P5MMX166/200....\$995/1060

Intel P5MMX 233mhz.....\$1160

AMD K6MMX166/200..\$980/1050

AMD K6MMX 233mhz.....\$1120

Cyrix 6xMX166/200.....\$960/1030

Intel 430TX chipset, 512k PBC

SDRAM-DIMM 32MB 10ns 168pin

UltraIDE 3.2GB Ultra-IDE 33/DMA

PCI 3D 2MB SVGA w/MPEG

1.44 Fujitsu floppy

15" SVGA color 1280x1024 .28

13" Hilevel tower case w/ 230 power

104 win95 KB and Mouse and pad

**Optional:**  
( 24x /32x cd-rom eide.....+\$90/120  
( Creative SB16/64.....+\$50/95  
( Creative 33.6K/56k Voice.....+\$65/105  
( USR Spt 33.6 / 56K Voice.....+\$120/160  
( Ultra-IDE: 4.3G/6.4G/8.0G.....+\$40/150/250  
( 17" SVGA 1280/ 15GS.....+\$240/180  
( Optiquest V773/V775.....+\$380/440  
( Viewsonic G771/G773/P775.....+\$420/440/560  
( Stereo speaker w.ac 80W/160W.....+\$15/45

## ATX MMX-Systems

Intel P5MMX166/200...\$1410/1470

Intel P5MMX 233mhz.....\$1570

AMD K6MMX166/200.\$1390/1460

AMD K6MMX 233mhz.....\$1530

Cyrix 6xMX166/200.....\$1350/1430

ATX, Intel 430TX chipset, 512k PBC

SDRAM-DIMM 32MB 10ns 168pin

UltraIDE 4.3GB Ultra-IDE 33/DMA

Mystique 220 3D 4MB PCI w/MPEG

1.44 Fujitsu floppy

NEC A500 / Sony100ES 15" SVGA

17" Hilevel ATX tower case w/ 230 power

Fujitsu 104 win95 KB and Logitech Mouse

**Optional:**  
( 24x /32x cd-rom eide.....+\$90/120  
( Creative SB16/64.....+\$50/95  
( Creative 33.6K/56k Voice.....+\$65/105  
( USR Spt 33.6 / 56K Voice.....+\$120/160  
( Ultra-IDE: 4.3G/6.4G/8.0G.....+\$40/150/250  
( NEC E500/A700/E700.....+\$80/320/440  
( Optiquest V773/V775/V95.....+\$200/280/1050  
( Viewsonic G771/G773/P775.....+\$220/260/380  
( Altec ACS45 /55 Speakers&Subwoofer...+\$110/200

## Business Hours:

Mon.- Sat.: 9:30am - 6:00pm  
(Sun. & Holiday: closed)

**Hottest WEB: atic.ca**  
(over 155,000 hits in 97.)  
with Hottest prices !!!

## Pentium-II Systems

Intel PII 233/266mhz..\$1320/1490

Intel PII 300/333mhz..\$1730/1990

Intel 440LX based Intel AL440LX /Asus P2L97

32MB SDRAM Diumm 168pin 10ns

4.3G Ultra/33M IDE HD

AGP 3D 4MB with EPEG

1.44 FD Fujitsu

17" ATX tower case w/ ATX power

104K Fujitsu keyboard

MicroSoft mouse / Logitech MouseMan

Dual PII 233mhz (two CPUs)...\$1940

Dual PII 266mhz (two CPUs)...\$2300

Dual PII 300mhz (two CPUs)...\$2760

Dual PII 333mhz (two CPUs)...\$3280

Optional:

(SDRAM 64MB / 128MB .....+\$80/340

(ATI xpert@play 4M / 8M AGP.....+\$150/260

(Mystique220 4M PCI .....+\$60

(Millennium-II 4M PCI / AGP.....+\$130/150

(#9 Resolusion AGP 4M AGP .....+\$240

(SB AWE64 / Gold / PCI Sound.....+\$95/240/80

(24x /32x CD-ROM .....+\$90/120

(ViewSonic G771/ P775 / P815 .....+\$600/780/1800

(Sony200ES/200GS/400PS.....+\$720/920/1540

## NEC Shopper

• NEC A500/E500/M500 15"....\$425/490/550

• NEC A700/E700/M700 17"....\$760/880/970

• NEC P750 /P1150 1600x1280 .25..\$1050/\$2050

## Intel Centro II

- Intel CPU P5MMX166/200/233..\$155/198/315
- Intel CPU PII-233/266.....\$420/585
- Intel CPU PII-300/333.....\$810/1095
- Intel Venus 440FX ATX Pro M/B.....\$140
- Intel LT430TX ATX MMX M/B.....\$160
- Intel AL440LX ATX PII M/B.....\$245
- Intel DK440LX ATX Dual-PII UW/Lan....\$690

## ViewSonic

E665	15'	.28	1280X1024	\$380
15GS	15"	.27	1280x1024	\$410
V773	17"	.26	1280x1024	\$590
G771	17"	.27	1280x1024	\$600
G773	17"	.26	1280x1024	\$660
V775	17"	.28	1600x1280	\$690
P775	17"	.25	1600x1280	\$790
PT775	17"	.25	1600x1280	\$940
V95	19"	.26	1600x1280	1035
G790	19"	.26	1600x1280	1100
P810	21"	.25	1600x1280	1560
P815	21"	.25	1800x1400	1800

**OKIDATA**  
• Okipage 4W 600dpi...\$280  
• Okidata 6E 600dpi....\$415  
**Brother**  
• 730DX .....\$400  
• 160DX .....\$510  
**HP**  
• 692C...\$300  
• 6L.....\$510

All listed prices (reflect 3% cash discount), quantities  
and specifications are subject to change without notice.

## Advanced VAR dealer HP

HP full-line color Deskjet

HP full-line Laser printer

HP full-line Color Laser printer

HP full-line Plotter

HP full-line desktop / laptop computers

HP Servers

HP tape /HD /CD /Writers

# New Compaq head a real tiger

BY DAVID ROSEN

With sales and revenues at an all-time high, Compaq is the leader in the increasingly competitive

Canadian marketplace. A just-released International Data Corp. (IDC) Canada study found that Compaq Canada snagged the top

sales position for 1997, displacing long-standing leader IBM Canada. Compaq has also been the darling of the stock market, especially after the computer company announced it would purchase Tandem Computer Corp. (now completed) and Digital Equipment Corp. (expected to close by summer).

Clearly, these are good times for Compaq. To manage the integrated new company, Compaq recently introduced a new Canadian leader, Peter Ciceri. Born in Victoria, B.C., the 42-year-old has spent the last 13 years in Asia, holding increasingly significant positions at Tandem—most recently, as vice-president and managing director for Tandem Asia Pacific.

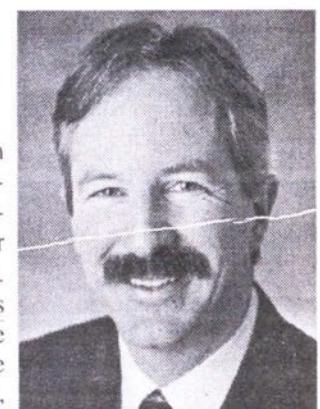
#### Hear me roar

Compaq's present success means Ciceri doesn't have to waste time fixing things. "We want to build revenues by 35 percent this year," Ciceri says. "This is the year of the tiger, and like the tiger we're going to be aggressive and operate from a position of strength."

Despite Compaq's enviable position, Ciceri's first year at Compaq Canada won't be a cakewalk. The company's proposed acquisition of Digital Equipment Corp. raises issues of possible large-scale layoffs of Canadian high-tech workers. Ciceri will have to stickhandle this potential powder keg through Compaq's Houston, Tex.-based board of directors.

Ciceri will also have to contend with the volatile low-end of the Canadian marketplace, where computer prices are expected to drop below \$1,000 this year. According to some analysts, a virtual "cola wars of computers" will drive retail prices still lower as manufacturers flood the market to gain market share.

Ciceri seems genuinely eager for the challenge. "My goal is that Compaq's Canadian sales will reach \$2 billion by the year 2000," he explains. Only time will tell if this tiger can keep Compaq purring along. ♦



**FUTUREDATA COMPUTER CO.**  
#130 - 3471 No. 3 Road  
RICHMOND, BC  
Tel: (604) 303-0894

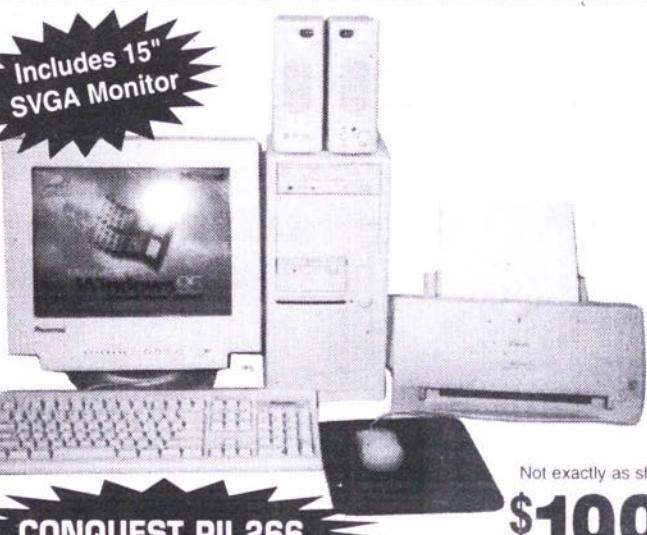
90 DAYS NO PAYMENT NO INTEREST

### CONQUEST PII 266

- PENTIUM PII 266 INTEL PROCESSOR
- 512K PIPELINE CACHE
- 32 MB SD RAM
- ATI 3D EXPRESSION 4MB VIDEO CARD / 64 BIT MOVIE CAPABLE
- 24X CD ROM
- 2.5 GB HARD DRIVE
- 1.44 FLOPPY DRIVE
- CREATIVE SOUND BLASTER
- 2 AMPLIFIED SPEAKERS
- 56K FAX MODEM/VOICE
- WINDOWS 95 CD & MANUAL
- 95 WIN KEYBOARD & MOUSE
- 15" SVGA MONITOR
- COLOUR PRINTER BJC-250

### CONQUEST COMPUTER

← AVAILABLE AT →



CONQUEST PII 266

FREE INTERNET ACCESS FOR 1 MONTH WITH ALL SYSTEM PURCHASES

FOR 1 MONTH WITH ALL SYSTEM PURCHASES

PII 266 32 MB SD 2.5 GB 4 MB 512K 56K FAX 24X CD 15" SVGA COLOR  
MEMORY HARD DRIVE VIDEO CARD CACHE MODEM ROM MONITOR PRINTER

### FREE SOFTWARE PACKAGE!!

- Windows 95 CD & Manual
- Microsoft Money
- Microsoft Scenes
- Microsoft Works
- Word Processing
- Spread Sheet
- Data Base

\$1999<sup>00</sup>

Not exactly as shown

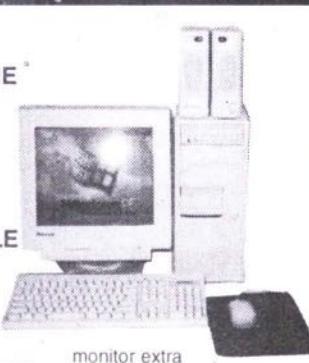
### CONQUEST 233 MMX

- TRITON INTEL CHIP SET
- PENTIUM 233 MMX INTEL PROCESSOR
- FULL MULTI MEDIA
- 512K PIPELINE CACHE
- 32 MB EDO RAM
- ATI 3D EXPRESSION 2MB VIDEO CARD 64 BIT MOVIE CAPABLE
- 24X CD ROM
- 2.5 GB HARD DRIVE
- 1.44 FLOPPY DRIVE
- KEYBOARD & MOUSE
- WINDOWS 95 CD & MANUAL
- 56K FAX MODEM/VOICE
- 2 AMPLIFIED SPEAKERS
- 15" SVGA MONITOR

For Only  
\$1499<sup>00</sup>Includes  
15" SVGA  
Monitor

### CONQUEST PII 333

- PENTIUM PII 333 INTEL PROCESSOR
- 512K PIPELINE CACHE
- 32 MB SD RAM
- MEMORY
- 32X CD ROM
- ATI 3D EXPRESSION 4MB VIDEO CARD
- 64 BIT MOVIE CAPABLE
- 3.2 GB HARD DRIVE
- CREATIVE SOUND BLASTER
- 1.44 FLOPPY DRIVE
- 56K FAX MODEM/VOICE
- WIN 95 KEYBOARD & MOUSE
- 2 AMPLIFIED SPEAKERS
- WINDOWS 95 CD & MANUAL

For Only  
\$2199<sup>00</sup>

### CONQUEST 200 MMX

- PENTIUM 200 MMX INTEL PROCESSOR
- 512K PIPELINE CACHE
- 16 MB EDO RAM
- 1.44 FLOPPY DRIVE
- 24X CD ROM
- 33.6 FAX MODEM/VOICE
- 1MB PCI SVGA VIDEO CARD (exp. 2MB)
- 2.1 GB EIDE HARD DRIVE
- FULL MULTI MEDIA SYSTEM
- 2 AMPLIFIED SPEAKERS
- WIN 95 ENHANCED KEYBOARD
- 3 BUTTON MOUSE
- 14" SVGA MONITOR

For Only  
\$999<sup>00</sup>Includes  
14" SVGA  
Monitor

### Multimedia Kit

- 24x CD ROM
- Creative Sound Blaster
- 60W Stereo Amplified Speakers

\$159<sup>00</sup>

**OPEN SUNDAY**  
**2 YEAR PARTS & LABOUR WARRANTY ON ALL SYSTEMS**

#### Linfield's Line

continued from page 34

ly improved and I'm sure not to have extraneous DLL files taking up memory, or corrupted INI or registry files, and I know exactly where and what everything is on my system. If all of your important data is kept on a shared hard drive, then ideally that is the only one you have to back up frequently. ♦

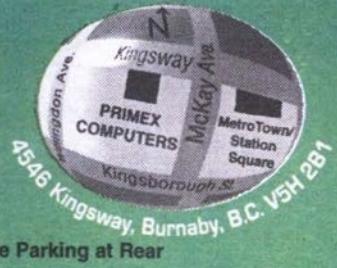
Next month: Everything you wanted to know about hard drives but were afraid to ask! Kevin Linfield can be reached via email at [linfield@idirect.com](mailto:linfield@idirect.com).

Your One-Stop Shop for Customized PCs • HIGH QUALITY • BEST SERVICE • LOW PRICE • EXPERTISE SUPPORT

# PRIMEX COMPUTERS

Tel: (604) 438-8900 Fax: (604) 438-8266 Tech: (604) 438-8267

Store Hours: Mon-Sat 10 am-6:30 pm. Sunday & Public Holidays Closed • Call Today or Visit Our Store for our Latest System Prices • Free Parking at Rear



Super Deal

## THE POWER

### Pentium® 166MHz MMX \$909

(Lease \$33/mo)\* (Financing available)

512K Pipelined Burst Cache	
16MB EDO RAM	
2.1GB U-ATA Hard Drive	
24x CD-ROM Drive	
16 bit Sound Chip on-board	
60 Watts Stereo Speakers	
Panasonic 1.44MB Floppy Drive	
14" .28mm 1024x768 Monitor	
On-board 64bit graphic acc.	
101-Keys Keyboard	
15" Tower W/CSA P/S	
33.6 Int. Voice Fax Modem	
2-Button Mouse	
Mouse Pad	
Upgrades:	
32MB EDO RAM +\$40	15"/17" Monitor +\$95/335
3.2GB Hard Drive +\$45	32x CD-ROM Drive +\$30

C/W 16MB EDO RAM	
24x CD-ROM Drive	
2.1GB U-ATA Hard Drive	
14" Monitor	
33.6 Voice Fax Modem	
P200MMX	\$949
P233MMX	\$1059
AMD K6-166MX	\$909
AMD K6-200MX	\$949
AMD K6-233MX	\$989
IBM M2-200MX	\$869
IBM M2-233MX	\$959

Multi-Media  
Internet connected

1MB Pipelined Burst Cache	
32MB SDIMM 168pin	
2.1GB U-ATA Hard Drive	
24x CD-ROM Drive	
On-board Sound Chip	
120 Watts Stereo Speakers	
1.44MB Panasonic Floppy Drive	
15" .28mm 1280x1024 Monitor	
S3 Virge 3D 2MB with MPEG	
101-Keys Keyboard	
15" Tower W/CSA P/S	
33.6 Int. Voice Fax Modem	
Logitech 3-button MouseMan	
Mouse Pad	
Upgrades:	
64MB SDIMM 168pin +\$90	3.2GB HD +\$45
17" Monitor +\$240	32x CD-ROM Drive +\$30

### Ultimate Pentium MMX 233MHz MMX \$1309

(Lease \$43/mo)\* (Financing available)

P-166MMX	\$1159
P-200MMX	\$1199
AMD K6-166MX	\$1159
AMD K6-200MX	\$1199
AMD K6-233MX	\$1239
IBM M2-200MX	\$1119
IBM M2-233MX	\$1209

C/W:  
32MB SDIMM  
15" Monitor  
33.6 Voice Fax Modem  
24x CD-ROM Drive

ATI Xpert @ Play 4MB PCI/ AGP \$205/235 • ATI Xpert @ Work 4MB AGP \$220 • Racial 28.8 External Fax Modem \$55  
Syquest Sparq 1.0GB Parallel \$280 • Esoniq PCI Sound Card \$60 • Mitsumi CD-Writer 2801TE Int. IDE (8x Read/ 2x Write) \$440  
Diamond Viper 4MB SGRAM AGP \$230 • Western Digital 5.1GB Ultra Hard Drive \$315 • Motorola 56K External Fax Modem \$165

## TOSHIBA SONY

## CPU

Intel Pentium® 166/200/233MHz MMX	\$158/200/310
Intel Pentium® II 233/266/300MHz	\$420/580/820
Intel Pentium® II 333MHz	\$1220
IBM or Cyrix 200/233 MX	\$130/210
AMD K6-166/200/233 MX	\$170/210/250

## MAINBOARDS

Intel Pentium® II AL440LXNA/DK440LX (Dual)	\$243/737
Asus Pentium II P2L97/ P2L97D (440LX)	\$233/393
Asus TX97/TX97E / TXP4(430 TX)	\$195/195/160
Acer Pentium® II AX6L(440LX)	\$240
Acer AP5T 512K Burst (430TX) / ATX	\$150/160
FIC Apollo PA 2007 1MB Burst	\$145
FIC Apollo PA 2012 w/ AGP, 1MB Burst	\$190
ABit Pentium II P6LX (440LX)	\$205

## FLOPPY / HARD DRIVES

O.R. Tech. 120 MB Floppy Drive	\$155
120 MB Floppy Disk	\$23
WD Ultra 2.1/3.2/4.3/5.1/6.4GB	\$220/260/300/315/390
Quantum Ultra 2.1/3.2/4.3/6.4GB	\$205/250/295/375
Fujitsu Ultra 2.1/2.6 GB	\$199/220
Fujitsu Ultra 3.2/4.3/5.3/6.4 GB	\$235/275/330/370
Maxtor Ultra 3.2/4.3/7.0/8.4 GB	\$255/299/445/499

## TAPE / DAT / REMOVABLE DRIVES

Colorado T3000 3.2GB Int..	\$235
Colorado TP5 Int./ Ext.	\$285/349
Tape 3M TR-3 1.6GB/TR-4 4.0GB	\$43/49
Iomega Ditto 2.0 GB Int./Ext.	\$165/233
Iomega Ditto Max. 3.0 GB Int./Ext.	\$275/275
Iomega Ditto Max. Pro 10 GB Int. SCSI	\$399
Iomega Ditto Max. Pro 10 GB Ext. Para.	\$399
Iomega 100MB ZIP IDE/ ZIP Plus Ext.	\$145/269
Iomega ZIP Disk 100MB	\$18
Iomega Jazz Drive 1GB SCSI Int./Ext	\$390/419
Iomega Jazz Disk single/3-pcs pak	\$125/360
Syquest SyJet 1.5 GB Int. IDE or SCSI/Parallel	\$399/399
Syquest SyJet Disk	\$99
Syquest Sparq 1.0 GB Parallel/ Int. IDE	\$280/280
Sparq Disk	\$59

## THE PERFORMANCE

### Pentium® 200MHz MMX \$1189

(Lease \$39/mo)\* (Financing available)

512K Pipelined Burst Cache	
ASUS SP97-V Mainboard	
Built-in Video Chip	
32MB EDO RAM	
2.1GB U-ATA Hard Drive	

24x CD-ROM Drive	
Sound Blaster 16	
60 Watts Stereo Speakers	
1.44MB Panasonic Floppy Drive	
15" .28mm 1280x1024 Monitor	
33.6 Int. Voice Fax Modem	
101-Keys Keyboard	
15" Tower Case w/ CSA P/S	
Logitech 3-Button MouseMan	
Mouse Pad	
Upgrades:	
3.2GB Hard Drive +\$45	64MB EDO RAM +\$86
17" Monitor +\$240	32x CD-ROM Drive +\$30

Multi-Media  
Internet connected

## THE PROFESSIONAL

### Pentium® 200MHz MMX \$1539

(Lease \$50/mo)\* (Financing available)

512K Pipelined Burst Cache	
Asus TXP4 mainboard	
Triton 430 TX Chipset	
32MB SDIMM 168 pin	
3.2GB U-ATA Hard Drive	

24X CD-ROM Drive	
Sound Blaster AWE 64	
240 Watts Stereo Speakers	
1.44MB Panasonic Floppy Drive	
15" .28mm 1280x1024 Monitor	
ATI 3D Xpn+ 2MB w/MPEG	
Fujitsu Win95 Keyboard	
19" Tower w/ CSA P/S	
56K Int. Voice Fax Modem	
Logitech 3-Button MouseMan	
Mouse Pad	
Upgrades:	
64MB SDIMM +\$90	
4.3GB HD +\$45	
17" Monitor +\$240	
32x CD-ROM Drive +\$30	

Multi-Media  
Internet connected

## Ultra Pentium® II 233MHz \$2059

(Lease \$67/mo)\* (Financing available)

286MHz	\$2219
300MHz	\$2459
333MHz	\$2849

Upgrades:  
64 MB SDIMM +\$90 17" Monitor+\$240  
6.4 GB Hard Drive +\$80  
32x CD-ROM Drive +\$30



## VIDEO CARDS

### SCSI CONTROLLERS

### MULTIMEDIA

### CD WRITERS

### SCANNERS/PRINTERS/CAMERAS

### MODEMS

### MONITORS

Adaptec 2940UW Single/Kit	\$319/370

<tbl\_r cells="2" ix="1" maxcspan="1"

# digital workforce

## Repetitive strain do's and don'ts

### info box

Microsoft mouse. \$69.95.

800-563-9048

Logitech MouseMan. US\$49.99.

800-231-7717

Human Factors Association of Canada  
905-567-7193

BY S.J. ROSS

**T**endinitis, carpal tunnel syndrome, aching shoulders, strained backs, and even sore thumbs. We know the repetitive strain injuries (RSI) computer use can cause, but how do we avoid them?

For anyone who spends three, four, or even more hours a day on the computer, the following list of the five worst things you can do on your computer will help you determine if you are on a direct path to RSI disaster. Immediately following is a list of the top ten

tips that can help you reduce or even sidestep potentially disastrous RSIs.

So snuggle into your ergonomic chair and take an ergonomic break from your computer to read these ergonomic lists compiled with the assistance of Kathy Kawaja, an ergonomics consultant with Human Factors North Inc.

#### The five fastest ways to get RSI

1. Rest your wrist while keyboarding or mousing. "When you do this, the muscles doing all the work are in the forearm," says Kawaja. "They are small and not designed for this work and they quickly fatigue, which means you may get, for example, elbow tendinitis." Instead, Kawaja suggests you float your hands over the keyboard and only rest when not typing.

2. Look at the monitor for more than an hour without taking a break. "This can lead to eye strain and headaches," says Kawaja. "Take microbreaks and blink or gently cup your eyes to create a dark environment for 15 to 20 seconds or look at an object more than 20 feet away to change the demand on your eye muscles."

3. Work at the wrong height. "Your key-

board and mouse height should be just below your seated elbow height," says Kawaja. "If your working height is above or below that you are putting incredible strain on the muscles between your shoulder blades."

4. Overreach to use your mouse. "If your forearm is unsupported when you reach for your mouse, your neck and shoulder does most of the work, leaving you susceptible to injuries such as shooting pains that travel down the arm and burning, aching muscular pain," says Kawaja. "The mouse should be at same height as your keyboard and right beside your keyboard. And, your forearm should be supported on your arm rest when you are mousing, but not when you are keyboarding."

5. Work through the day without taking scheduled breaks and microbreaks. "There is a direct correlation between not taking breaks and injury," says Kawaja. "Most of the people I see don't take breaks and these are the people who have problems."

#### The ten best tips for reducing risk of computer-related injury

1. Remind yourself that you are a computer

athlete. "People forget that they are carrying out a job that is very strenuous," says Kawaja. "You need to be fit, so stretch and get some exercise, even just walking, regularly."

2. Take scheduled breaks, such as lunch, mid-morning, and mid-afternoon coffee breaks, and take 30- to 60-second micro-breaks every half hour. "Standing up to answer the phone, changing the back rest angle of your chair to lean back, or doing stretching exercises are excellent micro-breaks," says Kawaja. "A good exercise is standing with your feet shoulder width apart, both hands on your lower back, and gently stretching backward. Another good one is doing standing pushups in the corner of a room, one hand on either wall."

3. Don't shrug off persistent discomfort such as tingling and numbness in the hands, burning or aching in the neck or upper back, and any shooting or stabbing pains. "The three stages of RSI are: one, experiencing intermittent symptoms when carrying out computer work; two, experiencing persistent

continued on page 45

## MapleOak Computer Solutions

### INTERNET & MULTIMEDIA SYSTEM

Intel Pentium 166 MMX	Windows NT Certified
32 MB Memory	
2.1 GB Hard Drive	
1.44 MB Floppy Drive	
14" SVGA Color Monitor	
SVGA PCI Video Card w/1MB 104	
Key Windows95 Keyboard	
Tower Case w/230W CSA Power Supply	
Logitech Serial Mouse	
Panasonic 24X CD-ROM & Sound Blaster 16 & Speakers	
33.6K Voice Fax Modem w/Software & FREE one month internet	
<b>Windows 95 w/CD &amp; Manual</b>	
Extendible 5 year limited warranty (5 on labor, 2 on parts)	

**\$1188**  
\$38/month\*\*

### PENTIUM II AGP POWER STATION

Intel Pentium II 266MHz MMX	<b>\$1738</b>
32 MB SDRAM Memory	
3.2 GB UDMA Hard Drive	
15" SVGA Color Monitor	
1.44 MB Floppy Drive	
AGP Video Card w/4MB	
104 Key Windows95 PS/2 Keyboard, Mitsumi	
ATX Tower Case w/230W CSA Power Supply	
Logitech PS/2 Mouse	
Panasonic 24X CD-ROM	
Extendible 5 Year Limited Warranty (5 on labor, 2 on parts)	

### SYSTEM OPTIONS

Intel Pentium II 233/300/333	\$1581/1958/2356
------------------------------	------------------

### UPGRADE OPTIONS

Setup Windows 95/NT 4.0 Workstation	Add \$148/268
Upgrade memory to 64/96/128 MB	+\$88/176/348
Upgrade hard drive to 3/4/6/8/12GB	+\$68/118/228/348/448
Upgrade monitor to 15"/17" Monitor	+\$89/330
Add SMC PCI 10/100 Network Card	\$58

### Printer & Scanner

HP 670c/890cxi/1000cxi/1600c	\$288/548/689/1928
HP LJ 6L/5P/5N/4000	\$538/998/1480/1898/1600
Brother 730DX+/760DX/1660	\$410/510/1478
Canon BJ250/4300/4550	\$197/275/458
Epson 400/600/800/1520/3000	\$266/358/498/1088/2458
Okidata 4W/6E/6Ex(2mb)	\$285/448/628
HP ScanJet 5s/5p/6100c	\$268/338/998
MicroTek E3/E6/E6 Pro	\$228/438/799

**Monthly Special (In Stock)**

- 2 GB SCSI Hard Drive \$278
- Brother 760DX+ \$498
- ZIP Drive SCSI 100MB \$178
- LS-120 Floppy Drive \$148

### Downtown Office (Since 1990)

#500-1281 W. Georgia St. Vancouver, BC V6E 3J7

Tel: (604) 681-3770 Fax: (604) 681-3739

### Coquitlam Store:

1122 Austin Ave. Coquitlam, BC V3K 3P5

Tel: (604) 937-6300 Fax: (604) 937-6302

### SYSTEM UPGRADE

MEMORY	
30pin 1/4 mb parity	\$8/18
72 pin 4/8/16/32/64 MB EDO	\$18/25/42/85/288
SDRAM 16/32/64/128 MB (10 ns)	\$48/86/208/469

### HARD DRIVE / ZIP / JAZZ / TAPE DRIVE

UIDE 2/3/4/6/8/12GB	\$198/249/299/399/538/618
SCSI 2/3/4/6/8/23GB	\$295/365/430/538/689/2399
Jazz 1GB int/ext/disk	\$418/558/158
Tape Drive 2 GB int/ext/tape	\$168/238/29
Tape Drive 7 GB int/ext/tape	\$278/308/40
Tape Drive 10 GB int/ext/Tape	\$415/433/45
LS-120MB Floppy Drive/disk	\$168/18
Zip Drive Int IDE/SCSI/Parallel/Disk	\$145/198/212/18

### MOTHERBOARD & CPU (Upgrade 286,386,486 system)

Upgrade to P-75 for 486 System	\$58
Pentium MMX 166/200/233	\$268/318/398
AMD K6-166/200/233	\$288/348/358
IBM (Cyrix) M2-166/200	\$229/258
Pentium II 233/266/300	\$638/798/998

### INTERNET

33.6k/56k Fax Modem, Int.	\$49/99
Motorola 33.6k/56k Fax Modem, Ext.	\$99/188
USR 33.6/56k Fax Modem, int.	\$110/185
ISDN Modem Int(Cisco)/Ext (3COM)	\$198/288

### MULTIMEDIA

CDROM Drive 4x/12x/24x	\$68/88/98
16Bit/16/16 SCSI AWE64/Gold	\$26/54/99/258
Bundle 24x CDROM/SB16/Spks	\$168
HP 7200i CD-RW / CD-R Disk	\$558/2.2

### MONITOR & VIDEO CARD

14"/15"/17" monitor	\$188/258/498
PCI Video Card 1/2/4MB	\$35/48/65
Matrox Mystique200 2/4mb	\$138/168
Matrox Millennium II 4/8mb WRAM	\$245/358
Diamond Monster 3D 4mb	\$265
ATI Xpert@play PC2T DVD 4/8MB PCI	\$170/287
ATI All-In-Wonder Pro 4/8MB	\$358/428
S3 Video Card With 4MB & Video Capture	\$88

Novell Authorized  
Windows NT Certified

**\$3588**  
\$115/month\*\*

### NETWORK SUPPORT & SERVICE

IntranetWare 4.11 5/10/25	\$858/1169/1888
Windows NT 4.0 server 5/10/ws.	\$888/1098/268
MS BackOffice (NT/Exchange/SQL/Proxy ...)	\$3288
3 Year Same Day ON-SITE Warranty*	\$288
24 Hours Technical Phone Support	\$150
10 NE2000 Compatible ISA/PCI Combo	\$29/39
10/100 PCI Network Card 3COM/Intel/SMC	\$99/88/58
10 Hub 5/8/16/24 port	\$78/88/180/365
100 Hub 4/8/12 port	\$258/388/1089
2 port 10 & 100 Switch	\$391
Printer Server RJ45 Accton/HP/Intel	\$198/398/358
HP 4mm DAT Tape 4 GB	\$788
APC UPS 600/900/1250 VA	\$338/478/628
Standby Server (fault tolerant for anyserver)	\$3799
IBM PC Server 310 P200/32MB/8x CD	\$2288
Internet Junction (Connect LAN to Internet)	\$388 up
Cable 25'/50'100'/500'/1000'	\$15/22/35/120/200

*Your*  
**Gateway**  
*to the* **WORLD**



• **Internet packages for your business**



**CORPORATE PACKAGE**

**\$29.95 / mo**

no setup fee - includes flat-rate Internet access - no prime time restrictions - free software kit - web site up to 2mb with no traffic charges

**VIRTUAL SERVER PACKAGE**

**\$15 / mo**

setup fee: \$50 - includes domain registration, custom email and web address (plus applicable Internic fees)  
Microsoft Frontpage™ extensions.  
Digital Alpha™ 533Mhz web servers.

**WEB PUBLISHER PACKAGE**

**\$25 / mo**

no setup fee - 10 Mb storage - direct FTP access - no traffic charges - Netscape Commerce Server™

**ISDN PACKAGE**

**\$380 / mo**

no setup fee - dedicated high-speed 128 Kbps digital ISDN connection - no traffic charges



Now Available at no extra charge



**GET CONNECTED**  
**654-6088**

<http://www.intergate.bc.ca>

Email: [staff@intergate.bc.ca](mailto:staff@intergate.bc.ca)

Some restrictions may apply.

# Apple's fall—in excruciating detail

BY DAVID ROSEN

Suggesting that Apple has faced tough times is like saying the R.M.S. Titanic encountered a bit of ice. Everyone knows it happened, but they don't know why or how. Well, after reading Jim Carlton's new book entitled *Apple: The Inside Story of Intrigue, Egomania and Business Blunders* you'll know the story—in excruciating detail.

Carlton's book starts at a key turning point in the company's history: the June 13, 1993 firing of then-Apple chief executive officer John Sculley. What follows is a painstakingly detailed account of the errors in judgment, unbridled arrogance, and sheer bad luck sur-

## info box

**Apple: The Inside Story of Intrigue, Egomania and Business Blunders**, by Jim Carlton, from Times Business, distributed by Random House. 0-8129-2851-2. \$38.50.

rounding Apple's race for the bottom.

It's a tough read, but Carlton does a great job of distributing the blame, pointing out that it wasn't one individual or group that

brought Apple to its knees. The company's board of directors were paralyzed by increased competition; meanwhile, cadres of squabbling engineers ran up millions of dollars in project overruns. Perhaps surprisingly, Carlton finds few faults with John Sculley, suggesting his error was hiring the wrong people for the job.

Carlton reserves a special place in Hell for Jean-Louis Gassee, however, a fast-talking Parisian who once headed Apple's elite engineering group. According to Carlton, Gassee's infamous contributions included championing the not-ready-for-prime-time Newton, helping to raise prices during an industry-wide price war, and his campaign

against licensing.

Carlton presents evidence that Microsoft's Bill Gates (then only a multi-millionaire) outlined a licensing strategy that would have guaranteed the Mac OS—and not Windows—would be the dominant computer environment. Instead, Apple's arrogance and fear led to scrapping the deal, and eventually, paving the way to Microsoft's market domination.

Will readers discover why Apple's management team squandered one of the most valuable technological franchises in history? Perhaps not, but after reading all 442 pages of Carlton's Apple, they'll certainly understand "how." ♦

# Informative Internet title already dated

BY LYNN GREINER

Trying to stuff the entire Internet into a nutshell is a pretty tight squeeze, but author Valerie Quercia takes a shot at it in *Internet in a Nutshell*, a new Nutshell guide from O'Reilly & Associates. In about 450 pages, she covers topics ranging from browsing to Web-page authoring.

But the trouble with books about the Internet is that they quickly become out of date, often before they are even shipped. Some parts of *Internet in a Nutshell* suffer from this malady; they're not inaccurate, they're just yesterday's news. In Quercia's case, she covers the two most common browsers and their peripheral functions, such as mail and news, in great detail. I learned a

lot about the idiosyncrasies of both Netscape Navigator and Microsoft Internet Explorer (IE), although the Netscape program discussed (version 4.0) was obsolete.

The other chapters of the book more than compensate, though. The chapter on ftp contains a wonderful command reference for this cryptic piece of software, as well as detailed

continued on page 43

## Almax Technology Co. Ltd.

### Pentium P-166/200/233 MHz w/MMx

Intel TX Chipsets w/512K PBC  
Intel Pentium CPU w/fan H.S.  
32 MB 10ns SDRAM 168 PIN  
Panasonic 1.44 MB Floppy  
4.3GB UDMA Hard drive  
Matrox Mystique 220w/4MB RAM  
15" NI/LR 0.28 DP  
Mid 15" tower w/230 watts  
24x IDE CD-ROM Drive  
SB-16PNP  
MLI-691 60 Watts Speakers  
104 Keys Keyboard  
Logitech 2B Mouse  
**\$1350/1395/1590**  
please call for AMD or other CPU type systems

### Pentium II 233/266/300 MHz w/MMx

Asus P2L97 Intel LX 440 Chipsets  
Intel Pentium II CPU w/Fan H.S.  
32MB SDRAM 10ns SDRAM 168 Pin  
Panasonic 1.44 MB Floppy  
6.4GB UDMA <10ms Hard Drive  
ATI AGP Expert@Play w/4MB  
17" Optiquest V773 0.26dp 1280x1024 Monitor  
Mid 19" w/230 watts Atx  
24X IDE CD-ROM Drive  
SB-AWE 64 PNP  
Altec Lansing CS-40 Speakers  
Fujitsu 8725 PS/2 Keyboard  
Logitech 2B Mouse  
**\$2485/2675/2950**

### UPGRADE YOUR OLD SYSTEM

to Pentium 180 MHZ Performance for only \$350

Package includes:

- All-in-one motherboard w/built-in:
  - 180 MHz Cyrix GX CPU
  - 32MB EDO RAM 72 PIN
  - 16 bit Sound
  - video w/2mb max
  - Optional output to TV (add \$15)

Special

### Hard Drives:

WD 2.5GB UDMA	\$240
WD 4.3GB UDMA	310
WD 6.4GB UDMA	415
QTM 2.1GB UDMA	230
QTM 3.2GB UDMA	270
QTM 4.3GB UDMA	300
QTM 6.4GB UDMA	410
QTM 8.4GB UDMA	520
FUJ2.1GB UDMA	199
FUJ3.2GB UDMA	250
FUJ4.3GB UDMA	300

### Modems / Scanners

Motorola 56K w/voice int/ext	\$129/165
Digicom by Creative Lab 56K Int	109
UMAX 610S Scanner	199
UMAX 610P Scanner	189
UMAX 1200S w/photo deluxe	349
Epson P600 600x1200 w/SCSI Adaptor	330

Please call for other brand names

### Add-on cards:

S3 Virge DX, 3D 375 w/2MB (UPRG 4MB)	\$55
S3 Trio 64 V2 DX w/1MB (Upgrd 2MB)	35
3D AGP Cirrus 5465, 4MB Rambus	85
Cirrus 5446 w/1MB EDO (2MB UPGRD)	32
Cirrus 5464, 2MB Rambus	62

### Printers:

Epson 400, 720dpi	\$279
Epson 600, 1440 dpi	355
Epson 800, 1440 dpi	510
Canon BJC-80	385
Canon BJC 250	199
Canon BJC 4200SE	245
(Free BC-22 Value \$50)	
Canon BJC 4300	270
Canon BJC 4550	435
Brother 730DX+, 600dpi, 6ppm (Limited QTY)	399
Brother 760DX+ 1200dpi, 6ppm (Limited Qty)	525
Brother 1060 DX+, 600dpi, 6ppm (Dual Bin (limited Qty))	625
Lexmark 1000	195
Lexmark 2030	245
Lexmark 3000	339
Lexmark 7200V	645
NEC 150C	175
NEC 750C	275

### Multimedia:

NEC 24X IDE	\$99
NEC 32X IDE	135
Panasonic 24X IDE	99
Toshiba 24X IDE	102
HP CDW-7100I	529
HP CDW-7100E (parallel)	645
SB-16PNP	57
SB-AWE64 PNP	99
ESS 1868/1869 16 bit	25
Ensoniq PCI-32 bit	59
Altec ACS-40 Speaker	65
Altec ACS-45 W/sub	120
GNT 5000 w/sub	68
IBM SUB Woofer	59

WESTERN DIGITAL intel

ATI TECHNOLOGIES INC.

Quantum

We do leasing and financing. All prices are subject to change without notice.

1090 Kingsway Vancouver, B.C. Canada V5V 3C6. Tel: (604) 879-3232 Fax: 879-1266

# Words of working wisdom

COMPILED BY RENÉE WILSON

Some good advice from our writers who earn a living working from home:

## Get a second email account

Get a second email account for business and only whisper it to PR folk and clients. This is so that the email your moronic computer geek pals send you don't get mixed in with the paying work. Be strict about this.

—Marc Dacey

## Get a second phone line

The most important and difficult problem for anyone trying to work in one is avoiding distractions. It may sound simplistic, but you'd be surprised at how many people allow distractions to remain in their work environment. Get a separate telephone line for business, make it clear that you will not accept personal calls there, and stick to your resolve. Don't answer the door (unless you expect a client or delivery) or your home telephone during business hours. Turn down the home telephone bell so you won't even know when calls come in, checking your messages only once during the work day.

—Caryn Mladen

## Get used to "the office"

Know that you will always be in "the office"—no matter the time, day, or circumstance.

—Chris Guly

## Backup, backup, backup!

There are two kinds of computer users: those who've lost data due to hardware failure, and those who's turn has not yet come. Don't gloat if you're in the second category—rest assured, your turn will come. A regular backup strategy is your insurance against not only hardware failure, but also virus attacks, and even theft and fire. Do it now and then do it often!

—Alan Zisman

## Prioritize

Constantly reassess your priorities and ask yourself what is the best use of your time. Focus first on immediate project deadlines, second on long-term business goals (from marketing to training), and third on long-term management issues (from contingency planning to business positioning).

—S.J. Ross

## Shred not!

Among the many challenges awaiting the SOHO operator, there is nothing more pressing (or depressing) than losing the paper trail. No matter how sophisticated you get technology-wise, there is no escape from keeping hard copies of everything—receipts, letters, memos, invoices, the works. So, a good filing system is a must and it must be coupled with an equally adequate waste disposal mechanism. And under no circumstances should that include a shredder.

—Paul Angyal

## Sell your strengths, buy your weaknesses

In other words, make your business all about

delivering your expertise and your skills. Outsource what you don't do well. It may put a strain on your budget at first, but if you cost out

your time at the rates you deserve, you'll find that it's crafting widgets that makes money. Pay someone else to do your books and tax returns,

or to design the Web site where you'll sell the widgets. Don't waste your time and talents.

—Alan Thwaits



## SYSTEM-PRO COMPUTERS Ltd.

Tel : 583-9977 Fax : 583-9979

HomePage : [www.system-pro.bc.ca](http://www.system-pro.bc.ca)

email : [syspro@system-pro.bc.ca](mailto:syspro@system-pro.bc.ca)

### P-166MMX/ P-200MMX/ P-233MMX

- Giga-Byte PCI-ISA Board
- Pentium MMX CPU w/ Cooling Fan
- 32MB Ram w/ 512K Cache
- Panasonic 3.5" Floppy Drive
- Fujitsu 2.6G Hard Drive
- S3 Trio64 PCI Video Card w/ 2M Ram
- 15" Tower Case w/ Power Supply
- Acer 24X CD-Rom
- Sound Blaster 16 PnP Sound Card
- 30W Computer Speaker
- US Robotics 33.6K Internal Fax/Modem
- Logitech 3-Buttons Mouse w/ Pad
- Fujitsu Win95 Keyboard
- Proview 14" SVGA Monitor

1,359/1,400/1,522

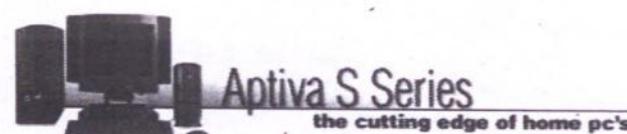
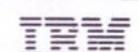
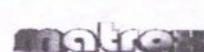
Internet Ready

### P-II 233MMX/ P-II 266MMX/ P-II 300MMX

- Giga-Byte Pentium-II ATX Board
- Intel Pentium-II MMX CPU w/ Cooling Fan
- 32MB Ram
- Panasonic 3.5" Floppy Drive
- Fujitsu 2.6G EIDE Hard Drive
- S3 Trio64 PCI Video Card w/ 2M Ram
- 16" ATX Tower Case w/ Power Supply
- Acer 24X CD-Rom
- Sound Blaster 16 PnP Sound Card
- 30W Computer Speaker
- US Robotics 33.6K Internal Fax/Modem
- Logitech 3-Buttons Mouse w/ Pad
- Fujitsu Win95 Keyboard
- Impression 5+15 VGA Monitor

2,024/2,205/2,467

Internet Ready



## IBM Aptiva S61 / S62

PII 266MHZ Pentium Processor  
6.4G HDD, 32M SDRAM,  
512 L2 Cache, 2/4M Video Card  
24XCDROM, 56K Fax Modem

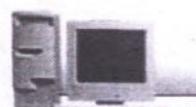
## IBM Aptiva L31 / L51

233MHZ MMX Pentium Processor  
4.2G HDD, 32M SDRAM,  
512 L2 Cache, 3D Video Card  
24XCDROM, 56K Fax Modem

## Aptiva L Series



the ultimate multimedia experience



## Aptiva E Series

performance and affordability

## IBM Aptiva L15/25/35/45

166 - 233MHZ MMX Pentium Processor  
2.5 - 4.3G HDD, 24 - 48M SDRAM,  
3D Video Card, 24XCDROM  
56K Fax Modem

Sales . Upgrade . Networking . Repairing . Leasing

Address : #1- 10330, 152nd Street, Surrey, B.C. V3R 4G8

(Across from GUILDFORD MALL, right behind Roger Video)

System-pro Computers Ltd. Has the right to change product prices and specifications without notice

# Investing for the new millennium

## Technology trends to watch

BY THOMAS KLEIN

### Mergers and acquisitions

The continuing trend of consolidation in the technology sector is showing no signs of slowing down. Mergers and acquisitions will continue in the technology sector for 1998. I think this will be a year of mega deals as well as many smaller acquisitions. For example, Compaq recently offered more than \$10 billion of stock and cash to acquire Digital Equipment. Netscape is rumored to be up for sale. Gateway 2000 has been mentioned as a takeover candidate. Small Internet companies are falling like flies. And this is just *some* of the mergers and acquisitions news of the past few weeks!

How do investors take advantage? The trend seems to benefit the larger companies over the long run. Therefore less risk tolerant investors should look at the big blue chip names and hold on for the long term. For the aggressive investor look for the smaller companies with a competitive advantage or out-of-favor companies with some intrinsic value that are trading at close to book value.

### Growth of enterprise resource planning

What the heck is enterprise resource planning? (That's ERP for short!) Well, maybe you recognize the names SAP, Peoplesoft, Baan and Oracle. These companies create packaged software for corporations that integrate departments and systems so that information can be shared in real time with employees, suppliers and distributors. They quarterback with a company's in-house technology departments and integrate scalable software solutions that increase the quality of information and the speed with which it can be shared. These top four ERP companies account for more than \$3 billion in revenues, and the industry is expected to grow at 35 percent for 1998.

Many analysts are predicting that the Year 2000 problem (also known as Y2K) may spur additional growth and revenues as companies look for solutions. As well in Europe there is the added problem of companies software complying with the rules of the upcoming European Economic and Monetary Union (EMU). While ERP companies have had a good run in the stock market last year the momentum for the future continues to look bright.

### Internet still growing and growing

The Internet keeps growing and growing and growing! So how do investors capitalize on this trend. When looking to invest, I don't want to speculate on the distant future (two or more years ahead)—it leaves too much room for error. I don't want to assume the risk of predicting if some concept or application will succeed. Investors should look at what is happening right now and where it should be over the next year to 18 months. I think the short-term problem of the Internet is how to increase speed, and that means bandwidth. The problem is that everyone has known this for the last couple of years and everyone wants a piece of the pie.

So, while the infrastructure of the Net has been the best place to invest in the past, the future is getting more complicated. Microsoft's \$1-billion investment in Comcast to support the cable broadband solutions will increase competition in an arena that has been getting more crowded over the past year. Plus there is always the threat of new technologies in the form of wireless and satellite. Therefore investors should choose wisely when investing in the Internet sector even from the perceived less risky infrastructure standpoint. The larger companies look like the winners in this sector because they have access to the capital and the deep pockets needed to ride out pricing competition. The problem I see is a bigger pie with lower

margins, which suggests lower earnings, leading to lower share prices.

### Dominance of Microsoft

Everyone loves to hate Microsoft but it continues to maneuver around obstacles and make successful decisions. Last year it took on all challengers and hardly broke a sweat. In 1997, it dealt a crippling blow to Netscape's growth. Oracle's network computer doesn't look like a serious threat. Even the U.S. government couldn't derail Microsoft in a meaningful manner. Plus, I think Bill Gates realizes he has to improve his public relations with both the government and the public—which should dispel some of the detractors.

The question for an investor should not be popularity but can a company grow? Growth is critical to the upward momentum of Microsoft's share price and growth in the technology market has not reached a point of saturation. Many analysts are concerned that the growth in the U.S. is slowing and that Asia, the future star of growth, has been derailed. Yes this may be true in the short term, but to balance these negatives Europe and Japan are poised for recovery. Both Europe and Japan have seriously lagged behind North America in technology and will have to spend more efforts over the next few years to catch up. The continuation of global growth will bolster Microsoft but will also create many other strong complementary niche players.

### Expansion of niche players

Niche players are companies that carve out a piece of the technology sector and try to add value to that area. Corporations have become highly computerized and this creates demand for more specialty applications. The general infrastructure of technology has been laid out and future explosive growth will be provided by companies that specialize in filling corpo-

rate needs. This is an area that only investors with a higher degree of risk tolerance should explore.

What I am looking for is a company with an ability for innovation. I'm not looking for a Microsoft giant killer but companies that coordinate or partner with existing technologies and create a competitive corporate advantage.

An example of an immediate corporate need is the storage of existing data and the retrieval of that data. Businesses are looking for ways to access critical data more quickly and cheaply than their competition. Improvements are also needed in document copying, printing and photography. Copying and photography are merging with printing and the companies that can make the transition easier could benefit. Another short term need is remote access, as employees depend on systems in the office, the need to interact outside the office becomes more critical.

For dreamers who want a niche to bet on the distant future my guess is look for speech recognition technology to reduce the dependence on the keyboard. ♦

**Thomas Klein is an investment executive with ScotiaMcLeod and can be reached at [tom\\_klein@scotia-mcleod.com](mailto:tom_klein@scotia-mcleod.com)**

The material contained herein is for information purposes only and is not to be construed as an offer or solicitation for the sale or purchase of securities and/or commodities or commodity futures contracts. While the information in this publication cannot be guaranteed, it was obtained from sources believed to be reliable. ScotiaMcLeod Inc. and/or its officers, directors and employees may from time to time acquire, hold or sell a position in the securities and/or commodities or commodity futures contracts mentioned herein. ScotiaMcLeod Inc. is a member of The Securities and Futures Authority.

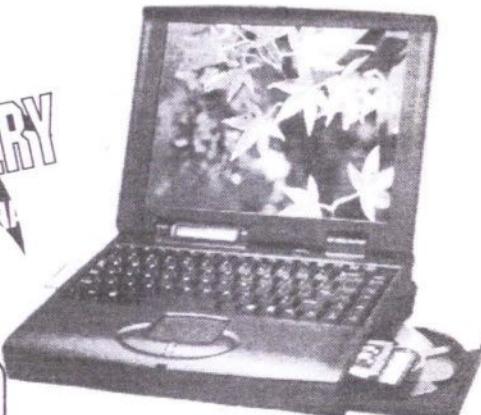
# NOTEBOOK BLOWOUTS

486 LABTOPS FROM ..... \$597  
PENTIUMS FROM ..... \$997

CALL NOW TO ORDER! 276-7054 toll free 1-888-527-7767

**PORTABLE**  
SOLUTIONS

call us for weekly fax hot list!



# Guerrillas target small business

## info box

Guerrilla Marketing with Technology: Unleashing the Full Potential of Your Small Business, by Jay Conrad Levinson, from Addison-Wesley Longman Inc. \$20.95.

BY S.J. ROSS

Despite all the hype to the contrary, the computer is simply a tool. Used poorly, this tool can swamp you with frustrating and costly problems—but when used efficiently, it can enhance your work flow, increase your productivity, improve your cost-effectiveness, and boost your profitability.

Tips and techniques for the efficient use of this valuable tool abound in *Guerrilla Marketing with Technology: Unleashing the Full Potential of Your Small Business*, by Jay Levinson, prolific author of such books as *Guerrilla Marketing*, *Guerrilla Marketing Attack*, and *Guerrilla Marketing Excellence*.

Levinson offers a variety of helpful suggestions designed to teach SOHOs (small office/home office) how to maximize limited technological resources and compete with the big companies. The book covers an extensive variety of topics: creating a web site; using the Internet to access market data and anticipate industry trends; building an information network; enhancing stakeholder and customer relationships with real-time communications; and using databases to track existing customers and attract new business. Readers will also learn about managing finances with

financial-management tools; maximizing time by automating routine administrative activities; managing growth by monitoring systems and processes; using tracking software to manage inventory and increase stock turnaround; and using DTP (desktop publishing software) to design and distribute promotional materials, such as brochures and newsletters.

Evinson's reader-friendly manual provides several interesting case studies, a glossary of terms, an abundance of handy tips and even a What's Your Tech-ficiency Quotient? quiz. Six step-by-step start-up guides (ranging from How to Create and Deliver a Newsletter to How to Conduct Business Research on the Internet) make *Guerrilla Marketing with Technology* a handy introduction to maximizing the potential of your virtual office, though not an in-depth study on computer use. ♦



## Internet in a Nutshell

continued from page 40

instructions on how to use your browser's ftp, as well as Windows and Mac-based standalone ftp programs.

Chapters on finding people and information on the Internet include brief descriptions of popular search engines, complete with examples of their search commands, and a section telling you how to use Telnet to access library catalogues and other resources.

There are charts of file extensions explaining what kind of data each file type contains, and tables of commands for the news readers in IE and Netscape. There are also sources and descriptions of helper apps and file compression/decompression and translation utilities. Internet Relay Chat is explored in a brief chapter, and there are 60 pages dedicated to building your own Web page, including a detailed list of HTML tags.

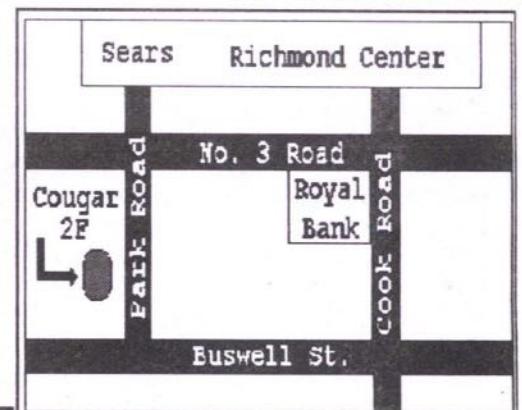
There's some discussion of Netiquette, but the whole issue of security is glossed over. This may be fine for experienced and aware users, but novices may get the idea that the Internet is safer than it really is. On the whole, though, *Internet in a Nutshell* is an excellent reference that explains the Net in simple and explicit language. ♦

# COUGAR SYSTEMS LTD.

250-8136 Park Road, Richmond

Tel: 604-273-3899 Fax: 604-273-5599

Tue. - Fri. 10:30-18:00 Sat. 10:30-17:00 Sun. & Mon. Closed



### Pentium MMX - Series

P-166 MMX	P-200 MMX	P-233 MMX
<b>\$ 1120</b>	<b>\$ 1200</b>	<b>\$ 1300</b>

**TX Pro MainBoard w/ 1MB Pipeline Burst Cache**  
16 MB High Performance SDRAM (10ns)  
2.6 GB (Ultra DMA - 33) Hard Drive  
S3 3D Virge PCI 2MB DRAM Video Card  
15" Non-Interlaced L-R SVGA Monitor  
**24X** CD-ROM, 16 Bit Sound Card  
1.44 MB FDD, Win 95 Keyboard, Amp Speaker  
Mid-Size Tower Case, Logitech Mouse + Pad

### Upgrade Option:

32 MB SDRAM / 64 MB SDRAM	40 / 110
4.3 GB / 3.2 GB / 6.4 GB	40 / 90 / 180
Acer 33.6 / 56 K Int Voice Modem	70 / 105
Window 95 (SR II)	120

### Pentium II + AGP Series

P II-233	P II-266	P II-300
<b>\$ 1870</b>	<b>\$ 2100</b>	<b>\$ 2350</b>

**ASUS P2L97 (440 LX) MainBoard w/ 512 K L2 Cache**  
32 MB High Performance SDRAM (10ns)  
3.2 GB (Ultra DMA - 33) Hard Drive  
**ATI AGP XPERT@WORK 4MB SGRAM**  
15" Non-Interlaced L-R SVGA Monitor  
**24X** CD-ROM, SoundBlaster 16 PnP Sound Card  
1.44 MB FDD, Win 95 Keyboard, Amp Speaker  
ATX Tower Case, PS/2 Mouse + Pad

### Upgrade Option:

80 MB SDRAM	100
4.3 GB / 6.4 GB	60 / 150
Acer 33.6 / 56 K Int Voice Modem	70 / 105
Window 95 (SR II)	120

All systems come with 3 years Labour and 1 year Parts Warranty. Government & Corporate Purchase Orders Welcome. Fax Order and Bid are accepted. Price and Systems configs subject to Change without notice. All products name, Trademark are properties of their respective owner.

### Monthly Specials

Motherboard	Modem
Matsonic MS-5560 TXP 1MB	\$116 Acer 33.6 / 56 K Int Voice Modem \$70/115
Matsonic MS-5900 TX 512K	\$115 USR 56 K Int Voice Modem \$180
ASUS TXP4 512 K	\$160
ASUS TX97E TX 512K	\$188 Canon BJC 250/4300/4550 \$199/260/450
ASUS P2L97	\$236 HP 670/692C/820C/870C \$270/355/335/520
ACER AP5TX 512K	\$160 HP Laser Jet 6L/6P/6MP \$515/950/1190
ACER AP58 SIS 512K	\$130
ACER AX6L (P II)	\$240 Proview 14" / 15" / 17" \$185/245/475
	ACANA 14" / 15" / 17" \$190/250/520
	Maxtor Ultra Acer 15" 54E/56C \$300/340
	Maxtor Ultra Acer 17" 76E/76C \$530/630
	NEC 15" A500/E500/M500 \$420/490/500
	NEC 17" A700/E700/P750 \$770/910/1060
	Mitsubishi 17" 87TXM / 21" 91TXM \$1070/2200
	Viewsonic & Optiquest Call for Current Price
	CL 5446 1M/2M \$28/38
	S3 Virge 3D 2M/4M \$50/65
	ATI 3D Xp + 2M/4M \$90/115
	ATI 3D PC2TV 2M/4M \$110/138
	Amp.Speaker / Yamaha MS 25 SubWoofer \$20/125 ATI all-in Wonder 2M/4M \$130
	\$260/290

# The balance sheet:

## CP! looks at the pros and cons of tax software

BY GEORGE PETRICKO

It's that time of year again, and in effort to appeal to the bean counter in all of us, we've broken down our reviews of the latest tax software into a kind of profit and loss statement, summarizing the strengths and weaknesses of each program.

Many happy returns!

### CanTax Deluxe

Web site: <http://www.cantax.com>

#### Strengths:

- For the first time CanTax has released both 16- and 32-bit versions of this program. Both the multimedia CD-ROM and a diskette version without multimedia are available in both versions.
- New seniors' work sheets, Seniors Benefit Planner and Senior Benefit Analysis, have been added to help the user to determine the impact of the proposed new Seniors' Benefit.
- A new series of tabs along the bottom of the screen makes navigating from page to page of a multi-page form, or from form to form, faster and easier.
- Added to its print option is an Index of Print Schedules, which is usually found only in professional tax programs. It indicates to the user which forms and schedules have been selected for printing.
- Phone, fax-back, or email technical support is available to registered users.

#### Weaknesses:

- Only 15 returns can be prepared. However, for users renewing directly through CanTax, upgrades can be purchased (at a fairly steep price).
- You can't customize the size of the icons. Many users who have been accustomed to using this feature will regret its disappearance.
- This is the final year for the DOS version of the T1 Personal.

### CoolTax

Web site: <http://www.cooltax.com>

#### Strengths:

- The data entry screens are clear, well laid out, and easy to follow.
- It's free! This program can be downloaded from FLS Research's CoolTax Web site and used to prepare up to 15 returns.
- Utilizing its Family Wizard, CoolTax can accommodate up to ten family members for optimum distribution of deductions and medical/dental/charitable/etc. receipts.
- CoolTax can accommodate a taxpayer with just one T4 and the usual deductions and credits, right up to the more complex return for the taxpayer with business or professional and/or real-estate income.
- CoolTax's Data Monitor feature at the bottom of the screen provides the user with running totals: Net Income, Taxable Income, Provincial Tax, Total Tax Payable, and Balance Due (refund) as figures are entered.

#### Weaknesses:

- This is a stripped-down version of FLS Research's professional TaxByte program with e-file, with the professional features disabled, although the icons for these disabled features are still displayed on the screen. The program would be much improved, and at the least certainly less confusing for the user, if the interface were modified to eliminate these dud icons.

### GriffTax for Mac

Web site: <http://www.grifftax.com>

#### Strengths:

- GriffTax provides for e-filing through any registered Revenue Canada Agent who uses GriffTax Professional.
- Only two companies produce tax software for Macintosh computers: GriffTax and QuickTax.
- Provides the option of printing the return in the sequence prescribed by Revenue Canada, or in the program-generated sequence. The user also has the choice of printing all or selected pages.
- GriffTax automatically backs up the user's data file.
- GriffTax is equipped with a unique dual-language (English/French) feature, which allows the user to work in one language and print in the other. This feature is peculiar to GriffTax: no other tax program has this capability.

#### Weaknesses:

- Unavailable for Windows.
- The program can produce only 25 returns. Upon payment to GriffTax of \$20, the user can produce a further 25 returns.

### HomeTax Deluxe

Web site: <http://www.hometax.com>

#### Strengths:

- This year marks the release of both 16-bit (Windows 3.1) and 32-bit (Windows 95 and NT) versions of this package.
- To facilitate the entry of figures, HomeTax now provides replications of Revenue Canada T-Slips.
- The Your RRSPs in Action feature for use in planning the user's current RRSP contribution and future retirement income is new to HomeTax this year.
- The 32-bit Auditor, newly redesigned, highlights problem areas with a red "X" placed on the trouble spots.
- Unlimited technical support for registered users is available by telephone, Web site, email, and faxback.

#### Weaknesses:

- Any Windows 3.1 (16-bit) user who enjoyed the multimedia deluxe version in previous years will be disappointed that it is unavailable this year.
- HomeTax only allows for the preparation of 16 returns.

### Icicle Tax

Web site: <http://www.netcon.ca/~icicle>

#### Strengths:

- This is an excellent and inexpensive add-on for the experienced spreadsheet user, knowledgeable in the preparation of tax returns.
- It is available for Microsoft Excel for Mac Version 3 or higher, Claris Works Version 2 or higher and Excel for Windows Version 5 or higher.

#### Weaknesses:

- Icicle Tax comes with the basic T1 General, Schedules 1 to 11, Provincial Tax and credit forms for all provinces except Quebec, T778 Child Care Expenses, T776 Rental Income, T2032 Professional Income, and T2124 Business Income.
- It is well laid out, with clear and concise on-screen instructions.
- It is capable of producing a high-quality income tax return. The formatting, graphics and printing capabilities are comparable to those produced by the sophisticated, better-known tax packages.

#### Weaknesses:

- Very little instruction is given in the preparation of the tax returns.
- Icicle Tax does not come equipped with a diagnostics routine to check for possible omissions.

### Quick Returns for DOS, Personal Version

Web site: <http://www.aracnet.com/~qrs>

#### Strengths:

- Quick Returns requires only 640KB of memory, making it an ideal program for users with, say, a 386 processor.
- A maximum of 32 tax returns can be prepared, roughly twice the number allowed by its competitors.
- Quick Returns provides for the processing of financial statements for real estate, business and professional income, farming and fishing activities, and Reconciliation-Dec. 31 Year-End. Forms for capital gains reporting and many miscellaneous forms and work sheets are included.
- Quick Returns has special Spouse Linkages permitting the user to import his or her spouse's net income into the appropriate box on the return and ensures that the same tax credits are not claimed by both spouses. Should this situation arise, the user is alerted.
- The print manager feature permits the user to print only the pages of the tax return required.

#### Weaknesses:

- Not available for Windows.

### QuickTax Deluxe

Web site:

<http://www.intuit.com/canada/quicktax>

#### Strengths:

- QuickTax includes a description of procedures for e-filing.
- Fully compatible with Windows 3.1/95.



With QuickTax Deluxe, as many as 18 returns can be prepared.

- The T-Slip and receipt information data entry screens have been redesigned for easier entry of data.
- The new Retirement Planner lets users enter the amount of their current RRSP, their proposed future contributions, the estimated return rates, and their age at the date of the last contribution. The Retirement Planner will then calculate the value of the RRSP at the date of retirement.
- QuickTax has introduced a revolutionary new feature that makes it the first tax program in Canada to allow the user to launch a Web browser directly from the program's RRSP Analyzer. The Web browser is set up to place the user at Canada's premier financial Web site, where they can partake of a veritable smorgasbord of RRSP information and advice.

#### Weaknesses:

- The Reminder Calendar does not highlight the current date.
- A complicated CompuServe email address is provided: [\(73537.2355@compuserve.com\)](mailto:(73537.2355@compuserve.com)). Something simpler would be better.

### SonicTax

Web site: <http://www.taxbuster.com>

#### Strengths:

- Can be downloaded from SonicTax's Web site.
- SonicTax provides for the processing of an unlimited number of income tax returns.
- The RRSP Limits Calculator is simple to use and very easy to understand.
- The Stock Market Trade planner is for the savvy market investor who wishes to track their investment portfolio, with a view to determining the effect on their tax status of any capital gains or losses.
- On certain lines of the return, SonicTax provides a Claim On/Off switch. By clicking this switch, the user can elect to take that particular credit. This feature ensures no errors are made by the user in entering claim amounts.

#### Weaknesses:

- No user's manual is available.
- SonicTax does not have an interview feature that leads the user through the tax return.

**Repetitive strain...**

continued from page 38

symptoms when working and not working; and three, experiencing symptoms that get in the way of the activities of daily living, such as opening doors and using a steering wheel," says Kawaja. "The minute you experience symptoms, you should seek help from your doctor."

4. If you are experiencing ongoing discomfort, have an ergonomic assessment performed on your workstation. Ergonomics consultants charge \$300 to \$500 for a SOHO (single office/home office) assessment.

5. Know your chair. "Know how to adjust the features on your chair and use these adjustability features," says Kawaja. "For example, periodically increase the backrest angle of your chair about five degrees so you can lean back slightly and take a microbreak."

6. Manage your stress levels. "Psychosocial factors, such as deadlines, can influence our level of stress," says Kawaja. "Mental stress equals physical stress, which equals an increased risk of injury. If you are feeling stressed, exercise, take deep breaths, or listen to relaxation tapes."

7. Be nice to mice. "Don't grip the mouse any harder than you have to because the harder you grip the mouse, the more muscle activity occurs and the quicker the onset of muscle fatigue," says Kawaja. "Get a mouse that fits your hand size and pretend it is a fine piece of china." Kawaja recommends that men consider the Microsoft mouse, while women, because of their typically smaller hands, consider the Logitech MouseMan. She also notes that "thumb trackballs are a nightmare" because of the strain on one digit and recommends that trackball users select a mousing device with a trackball large enough

**The balance sheet**

continued from page 44

**COMPUTER PLAYER!****EDITOR'S CHOICE****Editor's choice**

George's top pick is QuickTax. Here's why:

- QuickTax's RRSP Analyzer has a Web browser that takes the user directly to all of the information on RRSPs that he or she will ever require on the Internet.
- Unlimited technical support.
- You can register your programs at the QuickTax Web site. This saves the cost of a stamp, time, and inconvenience involved in completing and posting a registration card.
- New financial planners: Retirement Planner, Savings Planner, and Loan Planner. They help you to make wise decisions about RRSPs and to accumulate a sizable retirement nest egg. These planners far surpass those of its competitors in terms of layout and ease of use.
- The arrangement of QuickTax is simple and easy to understand.

These considerations, combined with its comprehensiveness, make QuickTax the tax-preparation program par excellence. ♦

George Petricko is a computer consultant and licensed e-file preparer. You can contact him at grp@planeteer.com.

to require the use of multiple fingers.

8. Don't be a banger or a clacker. "Listen to yourself typing," says Kawaja. "We tend to hit the keyboard four times harder than we have to and the more force we use, the quicker the onset of fatigue. Try to apply less force when typing." Kawaja recommends split

keyboards, such as the Microsoft Natural Keyboard (\$99.95 suggested list) for touch typists "because it allows wrists to come in at the right angle."

9. Position your monitor correctly. "The monitor should be arms-length away, with the top of the screen, not the top of the frame,

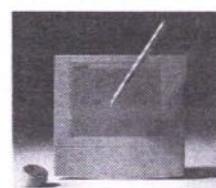
at eye level," says Kawaja. "And don't tilt the monitor up, because you will pick up the glare of overhead lights."

10. Have a qualified ergonomist assess your work station. To find a qualified ergonomist, Kawaja suggests you contact the Human Factors Association of Canada. ♦

AGFA	Minolta	Polaroid	Wacom	EPSON	AGFA	Minolta	Polaroid	Wacom	EPSON	AGFA
Minolta	EPSON	AGFA	Minolta	EPSON	AGFA	Minolta	EPSON	AGFA	Minolta	EPSON

**Special new product:**  
**EPSON 836XL Scanner \$3250**  
**12" x 17" scan area - 800 DPI**

**Wacom**  
**ArtPads**  
**6 x 8 - \$440**  
"our every day  
low price"



4 x 5  
6 x 8  
12 x 12  
12 x 18  
18 x 25

**EPSON Perfection 600 Flatbed Scanner**

Includes a mail in \$25 US rebate for an EPSON Ink Jet printer purchased from October, 97 to March, 98.

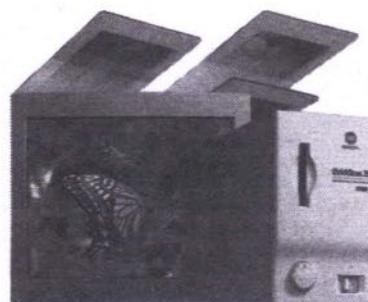
**\$359**

14" scan surface  
600 x 1200 DPI - 30 Bit  
OCR on smaller font size  
Scans 3D .25" from glass  
Adobe PageMill WEB package  
Xerox Textbridge OCR  
Visioneer PaperPort  
Adobe PhotoDeluxe  
Photocopy utility



**\$1295**

*Unbelievable quality*  
30 MB max file size  
Manual focus knob  
Accurate white point  
35mm slides & negatives

**MINOLTA QuickScan 35+ Film Scanner**

**Tricera**  
**Computer**

Monday - Friday 9AM - 5PM  
[www.tricera.com](http://www.tricera.com)

203 1836 West 5th Ave - Vancouver - 733-5702



**EPSON Dealer**  
**Color Ink Jet**  
**Warranty**  
**Repair**  
**Center**

[www.tricera.com](http://www.tricera.com)

**EPSON**  
**Supplies**  
**Large Sizes**  
Low prices

Photo paper  
Glossy paper  
Ink cartridges  
Photo card stock  
Photo transparencies  
Adhesive photo sheets  
Banner paper - 17" x 45'  
Back-lit plastic - large size  
Iron-on transfers - to 13" x 19"

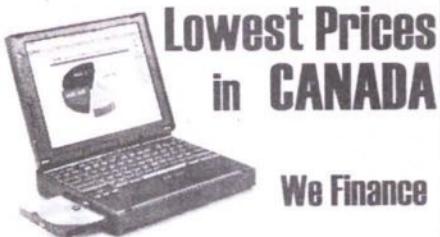
**EPSON Stylus 1520**

**17" x 44" Paper sizes**

AGFA	Minolta	Polaroid	Wacom	EPSON	AGFA	Minolta	Polaroid	Wacom	EPSON	AGFA
Minolta	EPSON	AGFA	Minolta	EPSON	AGFA	Minolta	EPSON	AGFA	Minolta	EPSON

# Notebook City

## Laptops & Accessories



Lowest Prices  
in CANADA

We Finance

Over 120 models available

Memory/Hard Drive/Batteries  
Fax/Modems/Ethernet Cards

Port Replicators/Docking Stations

**You name IT, We got IT**

**Acer**

**\$1795**  
Lease \$55 a Month



WHAT  
a  
DEAL

**TROCON**  
Notebook Computer

**Superus S.24**  
233Mmx/3GB/32MB/14.1 TFT Screen  
20X CD/16Audio/Fax 56K

**\$4695**  
Lease \$145 a Month



Call  
for  
other  
models

**AST**  
COMPUTER

**Apple**

**ThinkPad**

**COMPAQ**

**Acer**  **TOSHIBA**

**digital** **HITACHI**

**Complete Price List On Line**  
**WWW.NOTEBOOKCITY.COM**

1125-13700 Mayfield Place  
Richmond, BC  
Tel: 207-0868  
Call Toll Free (888) 444-7644

Games

# LEGO Island plays well

BY MARC SALTZMAN

Over the past five to ten years, most of the classic board, tile, and card games from our childhood have gone through a conversion into computer format in some shape or form. Popular toys, such as Mr. Potato Head, jigsaw puzzles, and Barbie, have also made the transformation to the small screen.

But why? Are these games so abundant because our inner child is still calling, and we instinctively clutch at our last thread of adolescence? Is it the desire to pass on a piece of our own personal nostalgia to our kids? Or, perhaps it's just another case of multinational corporations looking to make a new buck with an old—but proven—franchise. Chances are it's a bit of all three.

Unfortunately, with a few notable exceptions, such as Monopoly, Hoyle's Classic Card Games, and Chessmaster 5500, the overall results have been less than stellar.

These thoughts traipsed through my mind as I witnessed the production at last year's Electronic Entertainment Expo (E3) conference in Atlanta for Mindscape's new LEGO



Island. This 3D action-adventure game for kids had arguably the largest display out of the bunch, complete with giant TV monitors with computer-animated presentations and a staff of over a dozen people dressed as characters in the game, spending three entire days furiously building life-size objects made out of LEGO blocks.

### Don't look back?

So, I waited until the game was released before I passed judgment to see if it was yet another bastardization of one of my favourite toys as a kid. I'm pleased to say LEGO Island is an excellent digital "port" to the PC. Here's why:

Based on the LEGO Town Play Theme, the 6- to 12 year-old player explores and customizes the island from a first-person view, as they assume the identities of various LEGO characters: Pepper the skateboarding pizza delivery dude; the extroverted Laura Brick; police constable Nick Brick; pizzeria owner Mama Brickolini; Papa Brickolini; and so forth. The entire game is hosted by a jolly narrator, The Infomaniac, who founded and built LEGO island a "zillion" years ago. Each of the characters has very unique personality and kids will surely grow to love the differences in look, dialogue, music, and talents of all the inhabitants. Speaking of music, there is more than 90 minutes of a fun, original score to listen to while playing.

After building and racing your custom vehicles out of LEGO pieces, such as helicopters, cars, water jets, and skateboards, you accidentally release the Brickster (the town bad guy) from jail. The climax of the game is chasing and capturing him before he destroys the entire island brick by brick. Personally, I

info  
box

**LEGO Island**  
from Mindscape, \$39.99 to \$44.99  
System requirements: Windows 95; Pentium PC (120 MHz or higher); 4x CD-ROM drive; 16 MB RAM; SVGA 640x480, 256 colors (graphic accelerator supported); Windows-compatible mouse and sound card.

had just as much fun exploring this bright, colourful world, even if it didn't help with the overall objective!



The entire game is navigated with a mouse, while the four arrow buttons on a keyboard aid in steering the vehicles. All characters and objects are rendered in true 3D, so the player can view the world from unlimited points of view. There are over three hours of animation, and LEGO Island also features Direct3D, so all graphic accelerator cards, regardless of the chip set, should be able to support the graphical and speed enhancements.

### Star Search, here we come

The animation and lip syncing are really something to marvel at (Mindscape developed a proprietary technology that combines dialogue and voice files on the computer, using a 100,000-plus word vocabulary and a myriad of facial expressions to match the vowels and consonants). Some of the celebrity voices employed for this product include June Foray (the voice of Rocky and Natasha from *Rocky & Bullwinkle* cartoons), David Lander (Squiggy from *Laverne & Shirley*), and 13-year-old John Morris (Andy in *Toy Story*).

For the ingenuity of the game, plus the relatively low price and high replayability factor, LEGO Island is a great addition to any kid's CD-ROM library. Other companies looking to revive classic games and toys should look to LEGO Island as inspiration.

After all, the word LEGO comes from a Danish word, "Leg-godt", meaning play well. And LEGO Island certainly does. ♦

## LOW PRICE MORE SERVICE

**Save your money and time.**

**When you buy our Computer  
System we provide 3 YEARS  
service in your home or office.**

**買電腦無後顧之憂，三年到府售後服務。**

**(604) 250-2168 • (604) 543-8226**

**ABOUND TECHNICAL EQUIPMENT COMPANY LTD.**

# Impressive 3D gaming for less

BY MARC SALTZMAN

When you're talking computer-game software and hardware, it seems like it's getting harder and harder to keep up with the Joneses. What's hot today is passé tomorrow, so gamers are forced to dig deep into their pockets to be part of the craze or sit back and watch others rejoice at new technology. Where do you fit in?

If you are one of the cautious people and tend to wait until prices drop, or if you're still paying for holiday gifts on your credit card and can't afford a considerable entertainment purchase, now is your chance to get involved in 3D graphics acceleration, the hottest trend to hit the PC gaming industry since the Internet.

The 3D card revolution is here and all the latest and greatest games require one—or at least strongly suggest you use one for maximum performance and appearance. Games can now be accelerated in speed, with frame rates to die for, and supported games have

gorgeous visuals with smooth textures, fog, coloured lighting, transparencies, and other neat effects, leaving blocky, pixelated games behind in the dust.

#### Spare the pig, and spoil yourself

Although 3Dfx Interactive's chip sets seem to be in the forefront right now, with its extremely popular Voodoo Graphics and Voodoo 2 boards (due to appear sometime in late March), Canada's own Matrox Graphics Inc., out of Montreal, has come up with an affordable solution so gamers can jump on the 3D bandwagon without needing to break open the piggy bank.

The Matrox m3D is a 3D-only video card that supplements your existing PCI or AGP 2D video card (with a minimum of 2 MB memory). No special patches or cables are necessary: simply install the board into an available bus slot at the back of your PC and install the software.

If a game is written to support Microsoft's Direct3D, NEC's PowerVR, or OpenGL chip sets, the graphics will be passed on over to the m3D for peak performance. The m3D ships with 4 MB of SDRAM, capable of cranking games up to 30 frames per second or higher (at 640x480 resolution), with maximum settings up to 1,024x768. I test drove Tomb Raider II, Moto Racer, Hexen II, and Quake II, and was very impressed with the way the games looked and played.

The m3D also has one of the most impressive game bundles of the boards on the market today: the full game of Ultim@te Race, a special nine-level OEM version of Hexen II (Continent of the BlackMarsh), and 20 other game demos.

The clincher? The Matrox m3D retails for only \$149 Canadian, or US\$99, which is about half the price of some of the high-end Voodoo Graphics, Rendition, or RIVA 128 boards—or about the cost of two or three computer games.

Kudos to Matrox for recognizing not all computer gamers have a huge budget for interactive entertainment, but still want to keep up with the latest trends in this fast-paced and exciting industry. ♦



# internet personal accounts

15 hours/month	\$10
100 hours/month	\$22 <sup>50</sup>
150 hours/month	\$30
ADSL Service	\$64 <sup>95</sup>

- no set-up fee
- no primetime restrictions
- free software kit
- free tech support
- Win 3.1/95/NT, Mac OS, OS2
- Free trial period
- Free web page (conditions apply)
- Service available in Greater Vancouver, Abbotsford, Kelowna, Nanaimo, and Victoria



**SmartNet**

114-3855 Henning Dr.  
Burnaby, BC V5C 6N3  
604-473-9700 phone  
604-473-9080 fax  
888-407-6937 toll free  
<http://www.smartt.com>

Powered by  
**BCTEL**  
Advanced Communications

**BCTEL**  
Authorized ISDN Partner

# 我的電腦是比別人慢

作者：林啓清 (JimLin)

## 一、前言

如果您有用過以前的PC/XT或是80286、80386等級別的電腦，您一定會很驚訝目前電腦的速度進步的如此神速？

在筆者很不容易買到了一個全高型的中古10MB(是10MB不是10GB哦)硬碟，在當時真是驕傲的可以傲視群倫。在當時，我也没有想到現在會去買3.5GB的硬碟……

而2.1GB的硬碟才剛出來沒多久，現在已經快買不到了，取而代之的是3.5GB或是4.3GB的硬碟，且6.xGB的硬碟也來勢洶洶？不管是CPU的改進或是硬碟容量的演變，最終目的就是掏光您口袋裡的錢？如何能在這種換機洪流中，依然保有自我，而不會隨波逐流，確實是需要有點智慧？有人在換了更快的CPU後，對著朋友猛抱怨，換了新CPU速度沒有變快，但口袋裡的錢卻少了許多？

廣告的本身就是一種催眠，它讓您覺得您需要去買廣告中的產品，而製作精美的廣告，這種催眠的效果越明顯，產品就賣得更好……

## 二、電腦慢的原因

很多人在抱怨自己的電腦很慢，所以很想升級自己的電腦，朋友也都說應該去換什麼樣的CPU，有些還言之鑿鑿表示換了一定會變快很多？要先知道電腦慢的原因，然後針對這個原因來解決，而不是人云亦云，瞎一通！

其實，筆者坦白告訴您，您電腦會慢的原因，那是因為您用了Windows 95，如果您把它換成Windows 3.1的版本，您一點都不會覺得電腦慢？如果您連Windows都不用，只用以前的DOS，您更會覺得您目前這部電腦幾乎直追超級電腦的等級……所以，問題的癥結點是您用了慢如烏龜的微軟昏倒系列軟體，而且微軟還規定您每年都要昏倒一次，所以從95年開始推出昏倒95、昏倒97(沒有正式發行)。據說，98年的昏倒操作系統即將推出，大家應該及早準備好避量的東西？

一定會有讀者對筆者的說法嗤之以鼻，認為筆者在說廢話？因為演變到目前，差不多每個人都已經習慣使用微軟的昏倒軟體，還說只要好用

，一年才昏一次沒啥大不了？所以，為了讓昏倒的效果更好，每個人都竭盡全力去增添硬體設備，絕對不讓別人的昏倒效果比您的好……

好了……言歸正傳……再不回來，一定有讀者會認為筆者會不會是昏倒，把腦子給撞壞了？

假設我們一定要用Windows的操作系統，那就一定要有快的CPU及一定容量的硬碟，還必須準備為數不少的記憶體(RAM)。

那如果我由現在的Pentium MMX換成Pentium II，那系統是不是會快很多？誰說的？筆者從來沒有說過這種話，實在不知道各位看倌從何處得來的消息？廣告嗎？除了CPU會影響速度外，有一個大家都忽略的地方，那就是硬碟？啥！沒聽過……

如果給我選換快CPU還是換快的硬碟，您猜我會選那個？我當然是選硬碟。因為CPU再快，它還是要等硬碟去存取資料，難道新型的CPU可以把整套Windows存在CPU或RAM裡面嗎？既然都是要去硬碟裡抓資料，那您為什麼一直在換主機板及CPU呢？同樣容量的硬碟，並不代表它的速度是一樣的，同樣牌子同樣容量的硬碟，也會有因機型不同，而有不同的速度(價錢當然不一樣)。這就是為什麼您翻開本雜誌的廣告，有的東西會比較便宜的關係囉！同樣規格的電腦，絕對會因為裡面所用的零件不同，而有不同的表現效率。所以，當您正慶幸自己買到一部便宜電腦時，千萬不要跟別人的電腦去比速度，否則您的心情可能會跌落谷底哦！

送給各位一句話，聰明人所做的事，不一定是聰明的。各位看倌，您聰明嗎？PS. 有關硬碟與Windows的關係，請參考上一期的雜誌即可。

## 三、Pentium II的迷思

如果您仔細觀察Intel的晶片發展歷史，您會發現從8088到80486是有長足的進步，到了Pentium (Intel並沒有出80586的CPU)後就逐漸放緩。而換了MMX的CPU在圖形的處理上確實有所進步，但在實際的處理速度並沒有顯著的差別？而內行的人，應該知道Intel所出的Pentium Pro賣得很差，逼得Intel只好再推出Pentium II來區隔市場。所以，我們可以說Pentium II是介於MMX及Pro之間的產品。那用Pentium II是不是會比較快？這倒是很見人見智的……但是提醒大家的是，Pentium II並不是像以前可以直接換主機板及CPU就行了？因為Pentium II只有ATX的機型，而沒有以前的AT的型號。除非您本來就是用ATX的Case，否則您如果要換Pentium II，建議您不用去想升級這件事，因為一點都不划算，乾脆直接買一部新的Pentium II主機。

有些讀者可能根本就搞不清楚自己的電腦是屬於AT還是ATX？很簡單，只要您是屬於ATX的機器，在您選擇

Windows上的關機功能之後，您電腦的電源也隨之自動關閉。如果是AT的電腦，還必須要手動去關掉電源開關，電腦才會真正關閉。

## 四、加快Windows的速度

如果在不換硬體的情況下，有沒有辦法讓Windows的速度變得快點呢？筆者提供以下建議：

### 1) 做磁碟重組

這個程式在附屬應用程式裡面的系統工具裡面。建議至少一個星期執行一次。

### 2) 刪除多餘的字型

放太多用不到的字型在裡面，會佔用較多的系統資源。如果您要刪除，最好找一位較懂的人幫您(如果您不是很懂)。

### 3) 不要安裝螢幕保護程式(使用Windows內含的即可)

像AfterDark這類軟體，能不裝就盡量不裝？

### 4) 不要安裝Plus

早期在Windows 95中文版，因為不裝Plus就沒有撥號網路，所以只好安裝Plus。現在如果您是使用OSR2(B版)，本身就已經內含撥號網路，所以不再需要安裝Plus。

### 5) 降低螢幕的解析度及顏色數

如果您的螢幕顯示卡不是很高級的，當您解析度調得太高，會佔用較多的CPU資源(您的顯示卡如果夠好，那就無所謂)。

### 6) 儘量不要安裝 駐式的防毒程式

如果您安裝駐式(就是會一直檢查您的檔案，有毒馬上跟您講的那種)的防毒程式，那會大大的降低電腦的效率。

如果怕中毒，可以每次有新的檔案或磁片，就用掃毒程式掃一次，那應該就不太會中毒了？

## 五、結語

上個月在台加文化協會所舉辦的演講，已經圓滿結束，很感謝許多熱心的讀者到場捧場，並提供許多寶貴的意見給筆者。在3月份的時候，可能會在台加文化協會再辦一場，不過筆者目前還不確定時間，如果讀者有興趣也可直接打電話到台加文化協會找Eddie Fang查詢。

如果您有任何批評指教，歡迎與筆者聯絡，以下是我的聯絡方式：

E-Mail: [jimlin@roger.wave.ca](mailto:jimlin@roger.wave.ca) 有興趣的讀者，可以直接連到筆者的WebSite，URL是<http://www.cads.com.tw>

# BIS COMPUTER SERVICE 中文電腦世界

專業服務：PC升級及維修  
軟件安裝、CD Roms 及 Modems

## 電腦教室

- 電腦裝嵌班 3月11-14日
- 星期三、五 6:30-8:30pm
- 星期六 10:00am-5:00pm
- 高級電腦維修班 2月14及21日
- 星期六 1:30-5:30pm
- Internet 網頁製作班 2月14及21日
- 星期六 10:00am-12:30pm
- Internet 應用班 3月12及19日
- 星期四 6:30-8:30pm
- 中文打字速成 2月28日及3月7日
- 星期六 10:00am-12:00pm

## 電腦系統

(Internet Ready & Multimedia Computer)

Pentium 233 HMX - \$ 1668

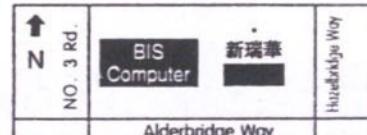
Pentium 166 MMX - \$ 998

Pentium 150 - \$ 798

Pentium II 266 - \$ 2388  
(包括 CD Rom、SoundCard )  
(電腦分期付款特別優惠)

## 把你的386或486升級

Intel 150Mhz 中央處理器  
512K Cache 底板  
可支援 MMX 技術  
16MB EDO 記憶體  
PCI 64 bit 1MB 視像卡  
連安裝及測試 \$ 399



# 121 - 4940 No.3 Rd.,  
Richmond (新瑞華隔鄰)  
Tel: (604) 214-8020 Fax: (604) 214-8021

## 臺灣電腦顧問公司

每月空運來加拿大，歡迎批發、零售(種類繁多)

1. 各種電腦相關中文書籍(去蕪存菁歡迎參觀)
2. 各種電腦相關課程(軟、硬兼吃，無所不能)
3. Internet 網路架設(多年專業經驗快速架設)
4. Internet 入門及進階(快速成為網路的玩家)
5. 電腦專業人員養成訓練(助您快速踏進電腦領域)

電話：(604) 618-1866 (Mon-Sat, 10:30-18:30)  
Mail: [jimlin@roger.wave.ca](mailto:jimlin@roger.wave.ca), <http://www.cads.com.tw>

歡迎查詢週末巡回商品示範

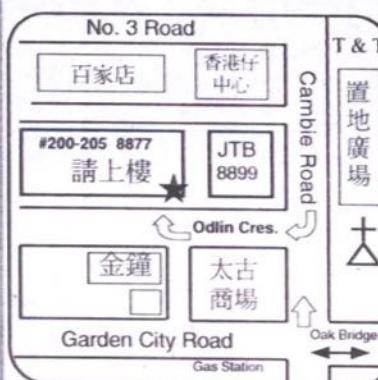
有多處地點方便大家參觀

辦公時間：朝十晚七

由205門口進入請上二樓

置地廣場斜對面由JTB 8899直入

Daily Hours: 10 a.m. to 6 p.m.  
Weekend Demo Also Available



# 快達

Instant  
Solutions

Suite #200-205 P  
8877 Odlin Cres.  
Richmond, B.C.  
Tel: 273-0383

**GoGo Pen 98** 精品漢筆 98 更有 5" x 4" 無線手寫版供選購

Completely rewritten, 32-bit code for Windows. New multiword input.  
Enhanced handwriting recognition.

精品漢筆最新版功能特多：可同一螢幕上連續書寫，可整篇辨認，手寫國、粵語發音功能，筆跡簽名，更有獨家筆順教學程式及用戶自訂面版等。

華夏中文系統 **Chinese Gateway** 分四套：可連筆或送翻譯工具  
This software can translate English phrases and text to Chinese automatically, it also includes English/Chinese dictionary containing 80,000+ words/phrases. Now a choice of TransPerfect Translator or a hand-writing recognition tablet.

\* 九種常用的中文輸入法：拼音、注音、英譯、簡易、倉頡、筆劃及手寫輸入  
\* 每套華夏視窗均有造字大師專業版及英漢雙向辭典擁有八萬多字辭庫  
\* 超值套餐：華夏中文系統連精品漢筆V6最新版全套只售\$419 (九折优待)

**Chinese LearnWare & Professional Interactive Chinese**

多媒體自學國語中文軟件—輕鬆學國語

**No Chinese Background Required!**

Product Demo on the Weekend

Please phone 273-0383 for a location near you!

本公司新店快將開幕 新店地址在烈治文置地廣場西北角 歡迎來電查詢  
Our new retail shop at Continental Centre in Richmond is opening soon.

市場新資訊（一）：  
精品漢筆 98 V6 現已到溫哥華

更新版內的功能更多，辨識率更高、更快。更增設全螢幕書寫和標準楷書筆順教學功能。

多格式輸入法：在書寫區內可分單格式或連續雙格/三格連續書寫。可依照個人日常輸入習慣、喜好及便利性，自行定書寫格數。對初學寫中文字的朋友比較容易操作。

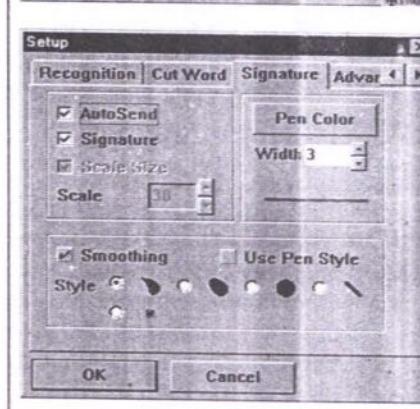
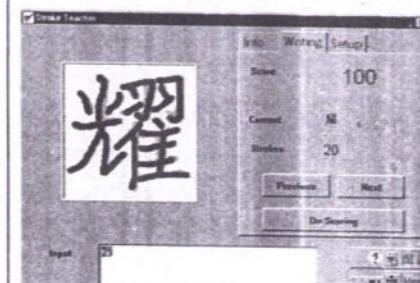
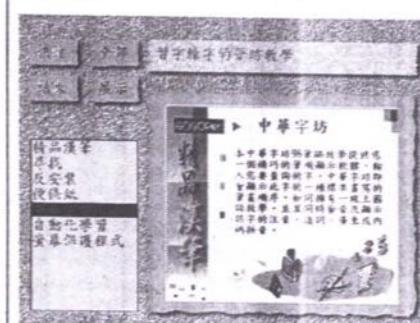
整篇辨認：可以不限字數一直書寫，將您的親筆筆跡完整保留，並整齊排列在畫面的紙上。由於書寫中不必分心理會辨認是否正確，所以不會影響使用者的文思，寫完之後，再進行辨認。手跡原稿可以儲存及列印，而且原稿也可以加入圖形。

全螢幕書寫：書寫範圍在整個螢幕上，可自由揮灑地書寫，不受範圍限制，給與用筆者無拘無束的書寫空間。

新版內更設有特殊筆頭處理。讓您揮灑自如，宛如手寫筆跡真實重現，摒棄以往點對點連線的筆跡。字跡美化處理帶出個人別具風格的手寫模式。中文人人會寫，但要能完整表現您的字跡，給你有中國古典筆跡的美化感就要借助精品漢筆 98 年版。

無限暢快

如往昔一樣，精品漢筆內有智慧精靈在旁提供記憶字、同音字等功能。



效力宏大

廣告

設 國 、 粵 服 務

請 電 : 六 零 八 二 六 八 八

www.buysell.com

What people  
are saying.



"Just a word of thanks! You guys have one of the best  
web sites I have seen. Certainly, the most user friendly and informative."

"Brilliant! This is a great service! Really a pleasure to use.  
Keep up the great work."

"This is way too easy. I love it! Thank you!"

"Fantastic! Your service will help validate my internet expenses. Thanks."

"Your format is very user friendly, and I appreciate the service you provide."

"I would like to let you know that I think this is an excellent service."

"Hi Buy&Sell gang...fabulous feature, even better if I sell my car!  
Keep up the good work."

"I'd like to commend you people on all the hard work that it must have taken to  
set all this up. I have been using the Buy&Sell for a good number of years, and now just recently  
with my home PC. I have sold all the stuff that I have advertised in the Buy&Sell.  
Keep up the good work."

"Thanks, I was able to find what I was looking for during the period I was subscribed...  
Very nice layout for the site. Keep up the good work!"

"Just a quick note to say that your website is one of the 'friendliest' I've just used. I made a mistake  
on my ad and it was easy to figure out how to change it. Also browsed the car ads and found one that  
I was interested in. Great job."

"Just thought that I would quickly write and tell you how impressed I was with Buy&Sell on-line. It's  
amazing how many phone calls I received regarding the ping pong table I was selling. There were so  
many calls that it sold that Thursday night.  
Anyway, once again - thank you.  
Your system is very simple to use  
and it works!"

**BUY & SELL**  
ON-LINE

# MULTIMEDIA SOFTWARE TECHNOLOGIES

365 W. Broadway Ph 872-0300

Open Mon - Sat 10 - 6 [WWW.biz-works.com/cds](http://www.biz-works.com/cds)  
All Software listed is new and full version

Linux	
Applixware (New) inc. Red Hat 5	99
Caldera Open Linux Base	99
CDE Client	99
Debian (New Ver.)	39
Free BSD (New Ver.)	29
Linux Developers Resource	29
Linux Games	19
Linux Journal Magazine	6
Linux Library	24
Red Hat Linux Official 5	49
Linux Developers Resource	29
Linux Red Hat Power Tools (New Ver.)	29
Linux Slackware 3.4	29
We also carry: Linux Books & Tshirts & Many other shareware titles.	

Productivity	
125,000 Clickart	69
Adobe Acrobat	94
Adobe After Effects	999
Adobe Illustrator 7.0	249
Adobe Photoshop 4.0	379
Adobe PageMaker 6.5	319
Adobe PageMill	99
Adobe Premiere 4.2	349
Borland C + Dev Suite	69
Borland Paradox	49
Borland Delphi Ver 2.0	49
Corel Draw 8	179
Corel Office Pro	44
Corel WP Suite Ver 8	69
First Aid 97	29
IBM Antivirus	29
Lotus Smartsuite 97	54
McAfee Anti-Virus 3.1	34
MS JPlus+	39
MS Office 97 Professional	299
MS Publisher 97	89
MS VBASIC Pro 5 & NT4	199
MS VBASIC Pro 5	99
MS V C++ Pro 5 & Win NT 4	199
MS Visual C++	99
Netscape Communicator	24
Netscape Power Pack	29
Norton Anti-Virus	39
Oil Change	34
PC Handyman	19
Print Artist 4.0	24
Print Master Gold Pub.	39
Print Shop CD Ensemble 3	39
Print Shop Greeting Cards	44
Quicken Deluxe	29
Ray Dream Studio	45
Uninstaller	39
WinFax Pro 8	109

Reference	
Am. Heritage Talking Dictionary	24
Audio Visual Chinese Dictionary	19
Bible Library	39
Bodyworks 6.0	24
Canadian Encyclopedia 98	39
Compton's Encyclopedia 98	22
Compton's Encyclopedia 98	19
Compton's Complete Cook Book	19
Compton's Reference Collection	24
Digital Humans	19
Easy Gardening	19
Electronics 2000	19
Encyclopedia Britannica	139
Family Tree Maker	29
Groliers 97	7
Groliers 98	24
Ham Radio 2000	19
Infopedia	19
Land Designer	19
Learning Language Cantonese	24
Learning Language French	24
Learning Language German	24
Learning Language Hebrew	24
Learning Language Italian	24
Learning Language Korean	24
Learning Language Japanese	24
Learning Mandarin	24
Learning Language Portuguese	24
Learning Language Russian	24
Learning Language Spanish	24
Learning Language Tagalog	24
Learning Language Vietnamese	24
Learn To Play Guitar	19
Learn To Speak English 2CD	29
Learn To Speak French 2CD	29
Learn to speak spanish 2CD	29
Learn to speak German 2CD	29
Mavis Typing, US Atlas, WAtlas, Chess	19
Mosby's Medical Encyclopedia	19
Voyetra Jammin Keys	24
Voyetra Digital Sound	24
Voyetra Keyboards	24
Voyetra Midi Gallery	24
Voyetra Music Games	24
Voyetra Musical Instruments	24
Voyetra Music Theory	24
Voyetra Music Write	24
Voyetra Recording Station	24

Reseller  
Inquiries  
Welcome

Price List Available

# You asked us...

## Triple printer action!

How would you suggest that I connect three (3) different print devices to one (1) Win95 PC? I have an HP855C, an HP laserjet 4L, and an Okioffice 44 Fax machine/printer/scanner, that I want to connect to a Gateway P266 running Windows 95.

Hcc709

**Alan Zisman responds:** Your typical PC will only have a single printer (parallel) port, two at the most; you can add a card to add an additional printer port or two—PCs can have up to 3 parallel ports. Give Gateway a call, and see if they have something to sell—otherwise, check with a local computer store.

Here's another alternative: you may want to purchase a switch box, with a manual A-B-C switch letting you connect multiple devices to a single parallel port, and switch between them.

## Registry eviction wanted

I am looking for info on how to remove the previous owner's name from the Windows 95 Registry on a used system.

Wes Clark

**Alan Zisman responds:** The simplest way is to run REGEDIT (from the Start Menu's Run option), search for the previous owner's name, and when it shows up, change it to what you want. F3 lets you search again for the same thing.

Note you may also want to change a company name, if that's listed, too. You can check the currently listed names by right-clicking on the My Computer icon, and choosing "Properties."

## Office pileup

I have two computers. One has 8 MB RAM and a 540 MB hard drive and the other has 16 MB RAM and a 1.2 GB hard drive. Is it possible to install the old version of Microsoft Office and Office 97 on my 16 MB RAM computer without affecting each version and my computer? I want to use the old version on my 8 MB RAM computer, as well as on my 16 MB RAM computer.

Bernadette

**Alan Zisman responds:** It is possible to install both versions of MS Office onto your more powerful computer, but I'd suggest you not bother. You can install Office 97 onto the more powerful one, and the older version (Office 95? an even older, Win 3.1 version?) onto the 8 MB machine.

Then, do two things. The Office 97 CD-ROM includes filters for Office 95 and the Win 3.1 versions of Word 6 and Excel 5 enabling those earlier programs to use files saved in Office 97 formats, and there's an update available on Microsoft's Web site enabling Word 97 to properly save in Word 95/Word 6 format (which was a problem with the original Word 97 release).

That way, you only need one version of Office on each computer, but can share files between them.

## Non-Plussed?

I have Windows 95B and I see a folder that is called Plus. Is this the Plus that I see people

talking about? If so, what exactly does it do for me?

Richard Perry

**Alan Zisman responds:** The OEM version of Win95B (which is the only version of Win95B) installs a few of the Plus utilities by default. These include the items that Microsoft has subsequently released for free on the Internet, such as font smoothing and showing windows contents when dragging (you should have a PLUS! tab in your Control Panel/Display settings).

As well, Win95B includes the version of DriveSpace, DS3, otherwise only obtainable as part of the Plus package. It doesn't include the full package of features, however, such as the Pinball game, the System Agent, or the Desktop Themes. Luckily, it also doesn't include the Internet Explorer 1.0 version bundled with the commercial Plus package.

## Email broadcasting possible?

I've been sending out a lot of emails recently and I'm starting to think there must be an easier way to do it. Right now I'm sending out about 100 copies of an electronic newsletter every month "by hand," cutting and pasting each email address and sending each individual email separately.

I know there are broadcast fax packages that can take all my names and then fax everyone quickly. Is there an equivalent software package for email?

Dan, via email

**MacShrink David Rosen replies:** You're in luck! There are a few software packages to do the job. The programs I'd recommend you check out first are Qualcomm's Eudora and Claris' Em@iler. Both allow you to load your names once and then send your messages to lots of people in a single broadcast. Qualcomm can be reached at <http://www.eudora.com> or by telephone at 619-658-5978. Due to the recent restructuring at Claris, the fate of Em@iler is somewhat clouded.

For now, however, Claris can be reached at its Web site (<http://www.claris.com>) or by phone at 800-3CLARIS.

## Finicky file names

Sometimes I can't rename a file. How come? Shauna, via email

**MacShrink David Rosen replies:** Well, as any good shrink should say, what do you think is wrong? There are many things that can be wrong, but I'll help you identify the most likely problems. The good news is that most of the problems are simple to identify and just as easy to fix.

First, the file could be locked. To find out, check the Get Info window for the "locked" checkbox. If this is the problem, you might be getting an "Error -45" message. To fix it, just click on the checkbox to unlock the file.

Next, the file could be being shared with someone else on your network. If this is the case, stop sharing the file (turn off file sharing in the Sharing Setup control panel in your System folder).

You can't change the name of a protected

# You asked us...

file. These protected files are those that your Mac needs to be able to find at all times, so they are "hardwired" into your machine's brain.

Protected file names include the Trash, the System, and the Finder. Imagine how confused your Mac would be if there were two Trash cans!

As well, you can't rename a file that is saved on a read-only volume, such as CD-ROMs and some disks containing copy-protected software.

Of course, it's also possible your file is damaged. Try using a backup copy of the file or use a utilities package such as Norton Utilities to see if the file can be saved.

Finally, the Desktop file or the disk itself could be damaged. Try to rebuild the Desktop (hold down the Command key and the Option key while restarting your Mac).

You might also try installing a fresh System from your original installation disks or CD-ROM. ♦

- Send Mac-related questions to David Rosen at [MacGuy@tcpcon.com](mailto:MacGuy@tcpcon.com). Note: all questions become the property of MacShrink and David Rosen.

- Send Windows or other software and hardware questions to Alan Zisman at [azisman@mail.bc.rogers.ca](mailto:azisman@mail.bc.rogers.ca).

# UNISERVE SYSTEMS CORP.

Your Specialists In Windows NT Networking

**HOT SMARTBOOK 8700**  
Huge 15.1" SVGA TFT Display W/ 4mb Video  
Intel Pentium 166 to 266 MMX  
16 to 128MB EDO Ram /  
1.4 to 3.0 GB HD  
20x CD-ROM  
16 Bit 3D Sound  
Touchpad, Win 95 CD  
Lithium Ion Battery  
AC/DC Adapter  
Carrying Case / 2 USB  
RCA Video Input, S-Video Out  
Limited 3 Year Warranty  
Toll Free Tech Support CAN/US

**Starting from \$5888**

**HOT Specials** **Canon**  
\* 17" Optique Monitor V773 .26 \$588  
\* Epson Stylus 600 1440 dpi Printer \$328  
\* Canon BJC4300 Colour Printer \$245  
\* COLOUR Video Conferencing Kit \$128  
\* Creative 3D Blaster Voodoo II 8MB \$298

Call for other Specials

\*\*\*\*\*Upgrade Special\*\*\*\*\*

TX MotherBoard/200MMX/32MB/SDRAM \$448

**Xerox Laser Printers**  
High quality Xerox Printers Ranging in speeds from 8 to 32 ppm.

\*Call us for pricing on your next system upgrade  
\*For more information visit us on our website <http://www.uniservesys.com>  
Send email to: [us@uniservesys.com](mailto:us@uniservesys.com)  
All Prices subject to change and reflect a 3% cash discount

**PRO X II**  
QDI Legend LX Motherboard  
Quantum 4.3 GB Ultra DMA HD  
64MB SDRAM  
ATI Xpert@Work 4MB (AGP)  
17" Optique V773 .26 Monitor  
32x CD-ROM  
Sound Blaster AWE 64  
GNT 5000 Sub Woofer System  
Flex 56K Voice/Fax/Modem  
Lite-On Multimedia Keyboard  
InWin Mid Tower with 230 Watt PS  
Genius NetMouse Pro W/Pad  
Windows 95 SR2

**P2 233 \$2488**

**P2 266 \$2688**

**P2 300 \$2988**

**P2 333 \$3288**

3 Yrs. Parts  
5 Yrs. Labour

**QDI** **ViewSonic**

We are Located at:  
2012 Wall Street  
Vancouver V5L 1B1  
Tel: (604) 215-3852  
Fax: (604) 215-0816

Store Hours  
Mon To Fri  
9 to 6  
Sat 10 to 5

McGill Street  
Dundas Street  
Hastings Street  
Uniserve Systems  
Vancouver  
Powell Street

The Internet brings a whole new meaning to "networking"!  
Now every business, regardless of size or type, has the opportunity to "network" on the world's largest computer network...the Internet. The fact is, Canadian business is waking up to the value of Internet Access and Presence at an unprecedented rate, recognizing the impact of the Net from marketing to communication functions. Imagine extending your market area beyond national boundaries, interacting with new business prospects without solicitation, saving hundreds, even thousands of dollars on your telephone and fax bills...and that's just the beginning! Question is...where does your firm fit into the picture? At Imaginet, we specialize in helping businesses determine their Internet needs, and providing the right corresponding Internet solution.

**Internet: Shmoozing at the speed of light.**

**Dedicated Access from \$99.95/mth**  
Phone for details

**imagi.net**  
[www.imagi.net](http://www.imagi.net) INTERNET ACCESS

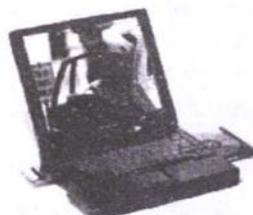
Imaginet is a full service Internet Access and Presence company, with services including: Corporate Dial Up Accounts / Dedicated Access Accounts / Web Page Design / Web Page Storage / Virtual Web Servers / Domain Name Registration / Classroom Internet Training ... and much more!

For more information about Imaginet, or to receive a free consultation, call us at 662-8332. dedication...imagine.that

## Twinhead

### Slimnote 9T

- Intel Pentium 133 to 166MMX
- 20X CD-ROM and Floppy
- Up to 128Mb EDO RAM
- 1.4GB to 4.0GB HD
- 12.1" DSTN to 12.1" TFT (XGA)
- 3D Sound w/Speakers & MIC
- TV Out, IrDA, USB, Win95, etc..
- International Warranty



Price from  
**\$ 2399**  
(Est. Street Price)

### Slimnote EX & XL

- Intel Pentium 200 to 266MMX
- 13.3" TFT to 14.2" TFT (XGA)
- 512k L2 Cache
- 20X CD-ROM and Floppy
- 4Mb 64bit 3D graphics card
- Up to 128Mb EDO RAM
- 2.1GB to 4.0GB HD
- 3D Sound w/speakers & MIC
- Windows 95
- TV Out, IrDA, USB, Li, etc...
- International Warranty



Price from  
**\$ 4399**  
(Est. Street Price)

Distributed in Canada by:

**GAON Technologies**  
British Columbia Alberta  
604-737-2999 403-488-1688 800-323-4266

[WWW.GAON.CA](http://www.GAON.CA)

For the absolute best prices on...

## Twinhead

**Genius**

**Samsonite**

**Jazz** **Qualtec**  
Speakers

**Acer Sertek**

**OSITECH**  
The PC Card Innovators

Jazz JS-100/200/300 (Pair) & JS-900 SUB

Dealers, VARs, Retailers please inquire...

# Marketplace

**PC CONNECTIONS**



Your Local  
Computer  
Store

ASUS Microsoft  
Sound Blaster  
Intel  
ATI  
WE USE QUALITY COMPONENTS  
SUNWOOD SQUARE TIME SQUARE  
370-3025 Lougheed Hwy 6600 No.3 Rd.  
Coquitlam, Richmond  
British Columbia British Columbia  
**941-4668** **270-4883**  
Two Locations To Serve You Better!

**INTEL PENTIUM 166MMX**  
Supports upto 233 MMX, 512K Cache  
32mb EDO RAM >2.1GB Hard Drive  
1.44 Floppy >IMB SVGA Video  
Keyboard & Mouse \$708  
**GIGABYTE PENTIUM MB**  
Supports upto 200mmx \$85  
**COLOUR MONITORS** from \$100  
**NEW 33.6 MODEMS** \$60  
**ARTEC FLATBED SCANNER** \$175  
Parallel 30-bit, 1.07 billion colours  
Prices are CASH discounted & subject to change, phone for most current pricing.  
**ON-THE-SPOT FINANCING**  
Instantaneous approvals

Is your COMPUTER being a **MONSTER?**  
**WE CAN TAME IT!**  
We Repair all makes & models of computers,  
Flat-rates available on many repairs.

We buy & sell New & Used Computer Items  
Call Today for Latest Prices  
B & C Computers  
6919 Russell Avenue, Burnaby  
Phone: 437-6919 Hours: Mon-Fri 10am-6pm

call us for  
advertising rates



**Jamie 608-2688**

call us for  
advertising  
rates



**Randy 608-2688**

Check Us Out



[www.computer-player.com/](http://www.computer-player.com/)

**EXPRESS REFILL**

ALL TYPE INKJET & LASER CARTRIDGES

LOWEST PRICE & BEST QUALITY  
GUARANTEED

ALL TYPE TO UPDATE MODEL (INCLUDE PHOTO KIT):  
CANON, HP, EPSON, LEXMARK AND ANY  
OTHER TYPE PRINTERS  
Call: 438-2408



OPEN:  
10 am - 6 pm  
Mon. - Sat.  
CYTO-TECH LABORATORIES INC.  
3333 Kingsway, Vancouver, B.C. V5R 5K6  
Tel: (604) 438-2408 Fax: (604) 433-3655  
EMAIL: [cryptech@axonet.com](mailto:cryptech@axonet.com)

BULK INK AVAILABLE IN VERY LOW PRICES  
RETAILER WANTED

Public Computer with Internet \$10/hr.

Christmas Card with photo \$1/each

INKjet paper & Card

Copies \$4/each for 100 + copies

Business Card \$10/100 full colour

Ink Refill Stations:  
East Vancouver 3333 Kingsway Tel: (604) 438-2408  
Downtown Location 625 Granville St. Tel: (604) 644-1982

## DATA RECOVERY

By Nick Majors' DATA RECOVERY LABS

Why do so many corporations, service technicians, small businesses & computer professionals insist on using Nick Majors and his team of experts for all of their emergency recovery needs? SIMPLE - We are just BETTER at what we do than anyone else in the world!

**Nick Majors' DATA RECOVERY LABS**

(TORONTO, CANADA / BUFFALO, NEW YORK)

The most technically successful facility available - anywhere - at any price!

Specializing in HIGH-END / TOP PRIORITY JOBS - including Network Servers, Advanced Operating System problems, Multi-drive RAID/ARRAY configurations, Optical Jukeboxes and Tape / DAT recoveries

1.800.563.1167

[www.datarec.com](http://www.datarec.com)



**ISDN**

Easy and  
Affordable

Power-up your LAN with ISDN Internet Access

**SOHO Skyway**

soar the SOHO Skyway

128 kbps Internet Access

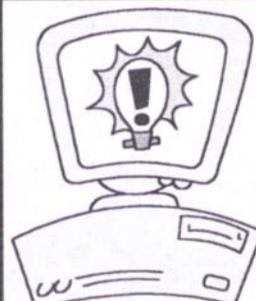
482 - 1222

email [sales@sohoskyway.net](mailto:sales@sohoskyway.net)

.... [www.sohoskyway.net](http://www.sohoskyway.net)

## Kennedy Hall Computer Swap Meet

**Sat. March 28, 10am-3pm**  
**8870 120 St. Surrey (Scott Rd.)**



Great deals all day long. Lots of vendor tables. New and used. Come check it out for your best deals on monitors, printers motherboards, CPU's, memory and much more. Everything for the home office.

**ADMISSION \$2.00**  
**Children 12 & under free.**  
**DOOR PRIZE AT 2:00 PM**

Vendor tables  
booked in advance.  
only \$25.00.  
Payment by new  
vendors must be  
received before Jan 15/98



**Info 582-9443**

*Heart disease and stroke cause  
37% of Canadian deaths each year.*

1-888-HSF-INFO

*Please give.*



Pentium II  
System  
333  
MHz

ComPu-2000 Technology Inc.

Mon-Sat 10am-6pm Sun & Holidays Closed e-mail: info@compu2000.com www.compu2000.com  
All prices and specifications subject to change without notice. We reserve the right to limit quantities. Personal shopping only. No retailers.Intel Pentium MMX  
166MHz

LEASE FROM

\$35/Mo\*

14" Monitor  
Included

Not Exactly as Shown

For ONLY \$999

## IBM Aptiva E/L/S Series



LEASE FROM

\$66/Mo\*

Until March 1, 1998, receive one year Free  
membership in IBM Owner Privileges (Value \$130).Aptiva E26 K6 233/32/3.2/24x/56K/15" ..... \$1949.99  
Aptiva E25 MMX200/32/3.2/24x/56K/15" ..... Call  
Aptiva E46 K6-233/32/3.2/24x/56K/15" ..... CallAptiva L31 MMX233/32/3.4/24x/56K/15" ..... Call  
Aptiva L51 PII-233/32/6.4/DVD/56K/15" ..... \$2999.99  
Aptiva L71 PII-300/32/6.4/DVD/56K/15" ..... CallAptiva S61 MMX233/32/3.4/24x/56K/15" ..... \$3499.99  
Aptiva S62 PII-233/32/6.4/DVD/56K/15" ..... SOLD OUT  
L & S series : upgrade to 17" monitor ..... +\$300.00

## Get a Lexmark 1000 Color Printer

for only \$140\* with the purchase of any Aptiva system and monitor.

IBM PC 300GL/PL Series  
166-233MHz MMX+Intel Pentium MMX166/200/233MHz  
Intel TX Chipset Motherboard  
Desktop Case w/200W PS  
32MBSDRAM, 256K L2 Cache  
2.5GB EIDE Hard Disk  
3.5" 1.44MB Floppy Drive  
2MB Video 64-bit  
16X CD-ROM Drive (Optional)  
33.6 Int. Voice/Fax/Modem  
104 Win95 Keyboard,  
2-button Net Mouse  
Windows 95 OS Ready  
Lotus SmartSuite Included

3-year parts &amp; 1-year labor IBM warranty

OTHER MODELS ALSO AVAILABLE, PLEASE CALL FOR FURTHER DETAILS

IBM PC 300GL 166MHz (6282-73U)

\$1699.99\*

\*Subject to stock availability.

Government And  
Corporate Purchase  
Orders WelcomeNetwork & Internet Solutions  
Networking your Windows95/NT computers,  
Starting at: \$199/node\* - call for details, subject to on-site inspection

COMPAQ Authorized Service Center

On-site or depot warranty service  
Desktops, Notebooks, & Monitors  
Genuine COMPAQ Parts - Fast ServiceIBM PC Server 310  
Pentium 200MHz/512K/32MB/4.0GB  
Starting at: \$3099.99 P.M. 8639-DESIntel Pentium II  
233MHz

LEASE FROM

\$57/Mo\*

15" Monitor  
Included

Not Exactly as Shown

Now ONLY \$1699

3D MaxStation 3000  
The MAXpower Graphics Workstation

NEW

The Super System  
for 3D Graphics & Multimedia  
Ideal for running 3D Studio Max  
Lightwave 3D, Softimage, etc.

\$6899\*

LEASE For \$250/Mo

Pls call for prices for other customized config.

ViewSonic G790  
19" Monitor  
Included

Not Exactly as Shown

Nothing gets in the way of a good idea.  
A frightening amount of power.1X 333MHz Intel Pentium II processors  
ASUS P2197-DS 440LX AGP Dual P II motherboard  
128MB SDRAM DIMM w/EPROM  
Seagate 4.55GB Ultra Wide SCSI with S.M.A.R.T.  
Diamond Fire GL Pro 8MB SGRAM  
17" ATX case w/250W power supply  
Toshiba 24X Internal EIDE CD-ROM  
Microsoft 2-button PS/2 Mouse  
Win95 104Keyboard  
Windows NT 4.0 Workstation  
ViewSonic G790 19" 0.25dp (18" Viewable) Color MonitorFind out why this piece of software  
is taking the film industry by storm.We Carry a Large Selection of:  
3D Design Software  
3D Animation & Digital Video Hardware

NewTek

LIGHTWAVE 3D V5.5  
for Mac or PC  
Available NOW!Intel Pentium II  
266/300/333MHz

LEASE FROM

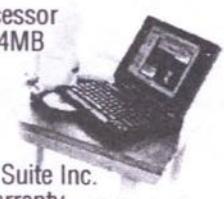
\$68/Mo\*

15" Monitor  
Included

Not Exactly as Shown

\$2029/2259/2599

## Pentium Notebooks

ThinkPad 310ED  
NOTEBOOK133MHz Pentium Processor  
16MB RAM exp. to 144MB  
1.6GB Hard Drive  
2MB EDO Viedo RAM  
12.1" Dual Scan  
12X CD ROM  
Win95 & Lotus Smart Suite Inc.  
1 year International warranty

Not Exactly as Shown

REDUCED

IBM 310ED ThinkPad Notebook

\$1999.99\*

\*Subject to stock availability.

440CDX MMX133/16MB/1.35GB/10X/12.1DSTN ..... \$2299\*  
440CDT MMX133/16MB/1.35GB/10X/12.1TFT/33.6K ..... \$2749\*  
460CDX MMX166/32MB/2.0GB/10X/12.1DSTN/33.6K ..... \$2749\*  
460CDT MMX166/32MB/2.0GB/10X/12.1TFT/33.6K ..... \$3949\*  
480CDT MMX233/32MB/3.8GB/10X/12.1TFT/33.6K ..... \$3949\*  
520CDT MMX166/32MB/2.0GB/10X/12.1TFT/33.6K ..... \$3949\*

## Pentium Notebook SPECIALS

AcerNote LT P150MHz/16MB/1.4GB/10X/11.3DSTN ..... \$1999\*  
NEC Versa P150MMX/16MB/1.44GB/10X/12.1TFT ..... \$3499\*

Not Exactly as Shown

\$2099\* \$3049\*

VB+ MMX133/16MB/1.4GB/10X/12.1DS/33.6K ..... \$2099\*  
VB+ 4360 MMX166/16MB/2.1GB/10X/12.1TFT/33.6K ..... \$3049\*

\$219.99

SPECIALS \$219.99

Motorola 33.6 PCMCIA Modem

Not Exactly as Shown

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

\$219.99

**nci**

# Netlink Computers PC97

Your one-stop computer and Internet store.

[www.netci.com](http://www.netci.com)E-Mail: [info@netci.com](mailto:info@netci.com)  
Fax: (604)451-8611Visit our web site at <http://www.netci.com> or <http://www.pc97.com> for instant quotations, up-to-date prices, daily specials, contests and more![www.pc97.com](http://www.pc97.com)Call Toll Free 1-888-NCI-9888 In Greater Vancouver Call 451-8682  
5068-B Kingsway (2 blocks east of Metrotown), Burnaby, BC, V5H 2E7M-F 9:30AM to 6:30 PM  
Sat 10:00 AM to 5:30 PM**System 1 (PCI)****CYRIX M2 CPU****MMX200 \$938**

Lease \$32 /Month

Financing Also Available

- 16MB 10ns SDRAM, 512K, TXPro
- 2.1GB EIDE hard drive, Mode 4
- 3.5" 1.44MB floppy disk drive
- PCI 64Bit Video Accelerator Support **Full Screen MPEG**
- 14" Monitor N.I.L.R, 1024x768, .28 dp
- 15" Mini-tower case 230W
- 3B Mouse & Pad
- 104 Win95 Keyboard &
- 24X EIDE CD-ROM Drive
- 16bit Full Duplex 3D Sound Card
- 60W Multimedia Speakers
- 33.6K Modem w/ SpeakerPhone
- 2 Year Parts and Labour Warranty

**Options:**

15" N.I.L.R. \$68 32MB SDRAM \$49 32X CD-ROM \$49 17" Monitor \$255

2.0GB \$59 2MB Video \$20 24XCD \$18 19" Tower \$28

P-150 \$1020 MMX P-166/200 \$1040/1055

MMX P-233 \$1199



CYRIX MMX 166/200 \$928 /\$938

AMD MMX K6-166/200 \$1045/\$1115

**System 2 (PCI)****INTEL PENTIUM MMX****MMX200 \$1320**

Lease \$46 /Month

Financing Also Available

- 32MB 10ns SDRAM, 512K, TXPro
- 3.2GB UltraDMA Hard Drive, 33MB/s
- 3.5" 1.44MB floppy disk drive
- S3 Virga 3D 4MB EDO **Full Screen MPEG**
- 15" Monitor N.I.L.R, Digital Control 1280x1024, .28 dp PnP
- 19" Med-tower case 230W CSA
- Logitech 2B Mouse
- 104 Windows 95 Keyboard
- 24X EIDE CD-ROM Drive
- IBM Mwave 32 Wavetable Sound
- 60W Multimedia Speakers
- 56K DSVD Voice Modem Full Duplex
- 2 Year Parts and Labour Warranty

**Options:**

32X CD-ROM \$49 17" Monitor \$255

24XCD \$18 19" Tower \$28

P-150 \$1298 MMX P-166/200 \$1313/1320

MMX P-233 \$1470

PRO-180/200 ATX \$1483/\$1910

PII 233/266 ATX \$1688/\$1880

PII 300 ATX \$2039

PII 300 ATX \$2248

PII 300 ATX \$2248

CYRIX MMX 166/200 \$1250/\$1278

AMD MMX K6-166/200 \$1303/\$1373

CYRIX MMX 166/200 \$1448/\$1489

AMD MMX K6-166/200 \$1515/\$1588

**System 3 (PCI)****INTEL Pentium II MMX****PII-233MMX \$1868**

Lease \$62 /Month

Lease Base on 36 Months, 10% Buy Out.

- 32MB 10ns SDRAM, 512K, Triton TX
- 4.3GB UltraDMA Hard Drive, 33MB/s
- 3.5" 1.44MB Floppy Disk Drive
- Matrox MGA Mystique II 3D 4MB OR (Diamond STEALTH II 3D 4MB)
- 15" Monitor N.I.L.R, Digital Control 1280x1024, .28 dp, PnP
- 19" Med-Tower case 230W CSA
- Microsoft 3B IntelliMouse (New)
- 104 Windows 95 Keyboard
- 24X EIDE CD-ROM Drive
- AW35 32bit Wavetable Sound Card
- 320W Surround Sound Speakers & MIC
- 56K ASVD Voice Modem Full Duplex
- 2 Year Parts and Labour Warranty

**Options:**

UltraDMA 6.4/8.4GB 89/149 64MB \$139

15" SONY ES \$199 AWE64 \$68

15" SONY ES \$199 AWE64 \$68&lt;/div

# YES, THESE DESKTOP PRICES DO INCLUDE A MONITOR.



## DELL BEST BUYS - HOME OR OFFICE SYSTEMS OPTIMIZED FOR YOUR COMPUTING BUDGET

**\$2499**

Business Lease: \$74/Mo.

**DELL DIMENSION XPS D233**  
233MHz PENTIUM® II PROCESSOR

Mini Tower Model  
32MB SDRAM Memory  
512KB Integrated L2 Cache  
4.3GB Ultra ATA Hard Drive  
15" 800HS Trinitron® Monitor (14.0" v.i.s.)  
STB nVidia 4MB AGP Video Card  
32X MAX® Variable EIDE CD-ROM Drive  
Integrated Yamaha Wave Table Sound  
Altec Lansing ACS-295 Speakers w/Subwoofer  
56K Capable® US Robotics x2 WinModem  
2 Universal Serial Bus (USB) Ports  
Microsoft® Windows® 95/30 Days Free Support  
**Microsoft Office 97 Small Business Edition w/Bookshelf**  
McAfee Viruscan 3.1  
3 Year Limited Warranty\*

\* Upgrade to a 6.4GB Ultra ATA Hard Drive add \$70  
\* Upgrade to 64MB SDRAM Memory add \$140

\*Consumer leasing also available, call for details.

**\$3499**

Business Lease: \$104/Mo.

**DELL DIMENSION XPS D266**  
266MHz PENTIUM II PROCESSOR

Mini Tower Model  
64MB SDRAM Memory  
512KB Integrated L2 Cache  
6.4GB Ultra ATA Hard Drive  
17" 1000LS Monitor (15.9" v.i.s.)  
STB nVidia 4MB AGP Video Card  
**NEW! DVD II Drive**  
Creative Labs AWE64 Value Sound Card  
Altec Lansing ACS-295 Speakers w/Subwoofer  
56K Capable® US Robotics x2 Modem  
2 Universal Serial Bus (USB) Ports  
Microsoft Windows 95/30 Days Free Support  
**Microsoft Office 97 Small Business Edition w/Bookshelf**  
McAfee Viruscan 3.1  
3 Year Limited Warranty\*

\* Upgrade to an 8.4GB Ultra ATA Hard Drive add \$70  
\* Upgrade to a 17" 1000TX Trinitron Monitor (15.9" v.i.s.) add \$110

**\$3999**

Business Lease: \$113/Mo.

**DELL DIMENSION XPS D333**  
NEW! 333MHz PENTIUM II PROCESSOR

Mini Tower Model  
64MB SDRAM Memory  
512KB Integrated L2 Cache  
8.4GB Ultra ATA Hard Drive  
19" 1200HS Monitor (17.9" v.i.s.)  
**Diamond Permedia2 8MB AGP Video Card**  
32X MAX® Variable EIDE CD-ROM Drive  
Creative Labs AWE64 Value Sound Card  
Altec Lansing ACS-495 Dolby Surround Sound Speakers w/Subwoofer  
56K Capable® US Robotics x2 WinModem  
2 Universal Serial Bus (USB) Ports  
Microsoft Windows 95/30 Days Free Support  
**Microsoft Office 97 Small Business Edition w/Bookshelf**  
McAfee Viruscan 3.1  
3 Year Limited Warranty\*

\* Upgrade to 128MB SDRAM Memory add \$200  
\* Add an Iomega Zip 100MB IDE Internal Drive with One Cartridge for \$120

**YOU WIN!**

## DELL AWARDS & REVIEWS

### DESKTOP

#### DELL DIMENSION XPS D333

With an outstanding ZD 3D WinMark score as well as excellent DVD playback, Dell's fully outfitted Dimension XPS D333 delivers the best value in our group of Windows 95 PCs

- Editor's Choice,  
PC Magazine (Feb. 24, '98)

### NOTEBOOK

#### DELL INSPIRON 3000 M233XT

"Reasonably priced with a stunning display, good battery life, performance and features."

- WINLIST,  
Windows Magazine (Jan. '98)

### SERVER

#### DELL POWEREDGE SERVER LINE

"User comments ranged from 'good price/performance' and 'powerful yet affordable' to 'solid server for a reasonable price'."

- IT LEADERS CHOICE,  
Computerworld, (Jan. 12, '98)



**\$1999**

Business Lease: \$59/Mo.

**DELL DIMENSION XPS M233s**  
233MHz PENTIUM PROCESSOR with MMX™ Technology

Mini Tower Model  
32MB SDRAM Memory  
512KB Single Bank Pipeline Burst Cache  
4.3GB Hard Drive  
15" 800LS Monitor (13.7" v.i.s.)  
STB Nitro 4MB PCI Video Card  
32X MAX® Variable EIDE CD-ROM Drive  
2 Universal Serial Bus (USB) Ports  
Microsoft Windows 95/30 Days Free Support  
**Microsoft Office 97 Small Business Edition w/Bookshelf**  
McAfee Viruscan 3.1  
3 Year Limited Warranty\*

\* Add a 3Com® 3C509 EtherLink® III 10Mb ISA Combo Card for \$90  
\* Add a Sound Blaster 16 Sound Card and Altec Lansing ACS-90 Speakers for \$90

**\$2999**

Business Lease: \$89/Mo.

**DELL DIMENSION XPS D266**  
266MHz PENTIUM II PROCESSOR

Mini Tower Model  
**64MB SDRAM Memory with ECC**  
512KB Integrated L2 Cache  
6.4GB Ultra ATA Hard Drive  
17" 1000LS Monitor (15.9" v.i.s.)  
STB nVidia 4MB AGP Video Card  
32X MAX® Variable EIDE CD-ROM Drive  
Integrated Yamaha Wave Table Sound  
Altec Lansing ACS-90 Speakers  
2 Universal Serial Bus (USB) Ports  
Microsoft Windows 95/30 Days Free Support  
**Microsoft Office 97 Small Business Edition w/Bookshelf**  
McAfee Viruscan 3.1  
3 Year Limited Warranty\*

\* Add a 3Com 3C900 EtherLink III 10Mb PCI Combo Card for \$120  
\* Upgrade to a Matrox Millennium II 8MB AGP Video Card add \$190

**\$3299**

Business Lease: \$95/Mo.

**DELL DIMENSION XPS D300**  
300MHz PENTIUM II PROCESSOR

Mini Tower Model  
**64MB SDRAM Memory with ECC**  
512KB Integrated L2 Cache  
8.4GB Ultra ATA Hard Drive  
17" 1000LS Monitor (15.9" v.i.s.)  
**Diamond Permedia2 8MB AGP Video Card**  
32X MAX® Variable EIDE CD-ROM Drive  
Integrated Yamaha Wave Table Sound  
Altec Lansing ACS-90 Speakers  
2 Universal Serial Bus (USB) Ports  
Microsoft Windows 95/30 Days Free Support  
**Microsoft Office 97 Small Business Edition w/Bookshelf**  
McAfee Viruscan 3.1  
3 Year Limited Warranty\*

\* Add a 3Com 3C905 Fast EtherLink XL 10/100 PCI Card for \$110  
\* Upgrade to 3 Year On-Site Warranty add \$129

## MULTIMEDIA NOTEBOOKS - INSPIRING PERFORMANCE

**\$3399**

Business Lease: \$101/Mo.

**DELL INSPIRON™ 3000 M200ST**  
200MHz PENTIUM PROCESSOR with MMX Technology

12.1" SVGA Active Matrix Colour Display  
32MB SDRAM Memory (Max. 144MB)  
512KB L2 Pipeline Burst Cache  
2.1GB ATA Hard Drive  
Modular Options Bay accepts 20X MAX® Variable CD-ROM, 3.5" Floppy Drive (both included)  
optional 2nd Lithium-Ion Battery  
PCI Bus with 12-Bit Graphics Accelerator  
3D Stereo Surround Sound with Yamaha Software Wave Table  
Smart Lithium-Ion Battery  
Fast IrDA 1.1 Standard Compliant  
Under 7 Pounds\*\*  
Microsoft Windows 95/30 Days Free Support  
**Microsoft Office 97 Small Business Edition**  
Extendable One Year Limited Warranty\*

\* Upgrade to a 3.2GB Ultra ATA Hard Drive add \$140  
\* Add a Nylon Carrying Case for \$79

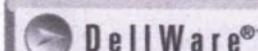
**\$4999**

Business Lease: \$142/Mo.

**DELL INSPIRON 3000 M266XT**  
266MHz PENTIUM PROCESSOR with MMX Technology

13.3" XGA Active Matrix Colour Display (1024x768)  
32MB SDRAM Memory (Max. 144MB)  
512KB L2 Pipeline Burst Cache  
4.0GB Ultra ATA Hard Drive  
Modular Options Bay accepts 20X MAX® Variable CD-ROM, 3.5" Floppy Drive, second Smart Lithium-Ion Battery (all included)  
PCI Bus with 12-Bit Graphics Accelerator  
3D Stereo Surround Sound with Yamaha Software Wave Table  
Smart Lithium-Ion Battery  
56K Capable® XJACK® Fax Modem  
Leather Carrying Case  
Fast IrDA 1.1 Standard Compliant  
Under 7 Pounds\*\*  
Microsoft Windows 95/30 Days Free Support  
**Microsoft Office 97 Small Business Edition**  
Extendable One Year Limited Warranty\*

\* Add an Advanced Port Replicator for \$199  
\* Upgrade to 64MB SDRAM Memory add \$280



• **Logitech Wingman Extreme Digital Joystick \$79\***

• **APC Back-UPS 400 \$189\***

• **Hewlett Packard DESKJET 692C add \$339**

• **Hewlett Packard LASERJET 6P add \$999**

### NEW HOURS

Mon-Fri 8am-10pm EST

\* Sat 10am-6pm EST

\* Sun 12pm-5pm EST

1-800-387-5754  
en français

• x2 PRODUCTS ARE CAPABLE OF 56Kbps DOWNLOADS DUE TO FCC RULES THAT RESTRICT POWER OUTPUT. HOWEVER, CURRENT DOWNLOAD SPEEDS ARE LIMITED TO 53Kbps. UPLOAD SPEEDS ARE LIMITED TO 33.6Kbps. ACTUAL SPEEDS MAY VARY DEPENDING ON LINE CONDITIONS. \*Non-Discountable Price. \*\*Leasing arranged by Dell Financial Services Canada, an independent entity, to qualified business customers only. Lease price based on a 48-month lease. D4C. First monthly lease payment due prior to delivery. Fair market value buyout at expiry of lease. \*SHIPPING AND APPLICABLE TAXES NOT INCLUDED. Limited time offer, prices and specifications valid in Canada only and subject to change without notice. Software does not include documentation and may differ from retail version. \*\*System weight with floppy drive in options bay. △ On-site service provided by a third party provider. May not be available in certain remote areas. ▲14X/Min. 11X/Min. Dell, the Dell logo, Dellware, Dimension and PowerEdge are registered trademarks and Latitude, Inspiron, DirectLine and the E logo are trademarks of Dell Computer Corporation. Intel, the Intel Inside logo, LANDESK and Pentium are registered trademarks and MMX and EtherExpress are trademarks of Intel Corporation. Microsoft and Windows are registered trademarks and IntelliMouse is a trademark of Microsoft Corporation. 3Com and EtherLink are registered trademarks of 3Com Corporation. Trinitron is a registered trademark of Sony Corporation. XJACK is a registered trademark of U.S. Robotics Mobile Communications Corp. All other trademarks and registered trademarks are the property of their respective holders. ♦ For a complete copy of our Guarantees or Limited Warranties please write to Dell Canada, 155 Gordon Baker Road, Suite 501, North York, Ontario, M2H 3N5. ©1997 Dell Computer Corporation. All rights reserved.

TO ORDER

**1-800-207-7486**

TO ORDER ONLINE

**www.dell.ca/store**

# Home PCs at Family Prices.



## Options available with system purchase

Brother HL730 Laser Printer .....	\$399
Brother HL720 Laser Printer .....	\$299
Canon 250 Inkjet Printer .....	\$399
56K Internal Fax.Modem .....	\$99
33.6K Internal Fax.Modem .....	\$59

Enquire about system models featuring  
**EXCITING  
SOFT  
WARE  
BUNDLES**

**#1**  
Microsoft Productivity Bundle  
Available only with IPC system purchase  
• Works 97  
• Encarta 97  
• Money 97  
• Golf 3.0  
• Magic Schoolbus Explores the Universe  
**\$89**  
Only with system purchase

**#2**  
Activity Bundle  
• Virtua Fighter PC  
• Pitfall  
• Mech Warrior  
• 3 VCD movies  
**\$69**  
Only with system purchase

**#3**  
Microsoft Office 97 Small Business Edition  
Available only with IPC system purchase  
• Word  
• Excel  
• Publisher  
• Outlook  
and other valuable software  
**\$299**  
Only with system purchase

For more info call us at:  
**1.888.446.4472**  
**www.ipc.ca**

**90 HOURS  
FREE  
INTERNET**

## The IPC Advantage Program

- Full three year warranty on parts and labour
- Onsite service for one year in most urban areas
- Toll-free technical support across Canada
- On the spot financing by CreditLink

**IPC**  
PERSONAL  
COMPUTERS

All systems include: Microsoft Windows 95, Microsoft Plus, speakers, a mouse and mouse pad

**Find out where to buy Canada's Favourite PC at 1.888.I-GO.4-IPC**

or see these incredibly affordable systems at an authorized IPC dealer near you